

THE DOMINION AT THE WEST.

A PICTORIAL DESCRIPTION

OF THE PROVINCE OF

BRITISH COLUMBIA,

1872.

CANADA AND LONDON: 1872.

THE GOVERNMENT PRICE ESSAY, 1872.

PRINTED FOR THE GOVERNMENT BY T. H. GIBSON.

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A BRIEF DESCRIPTION

OF THE PROVINCE OF

BRITISH COLUMBIA,

ITS

CLIMATE AND RESOURCES.

• THE GOVERNMENT PRIZE ESSAY, 1872.

BY ALEXANDER CAULFIELD ANDERSON, Esq., J. P.

* * * * *

Tendimus in Latium—

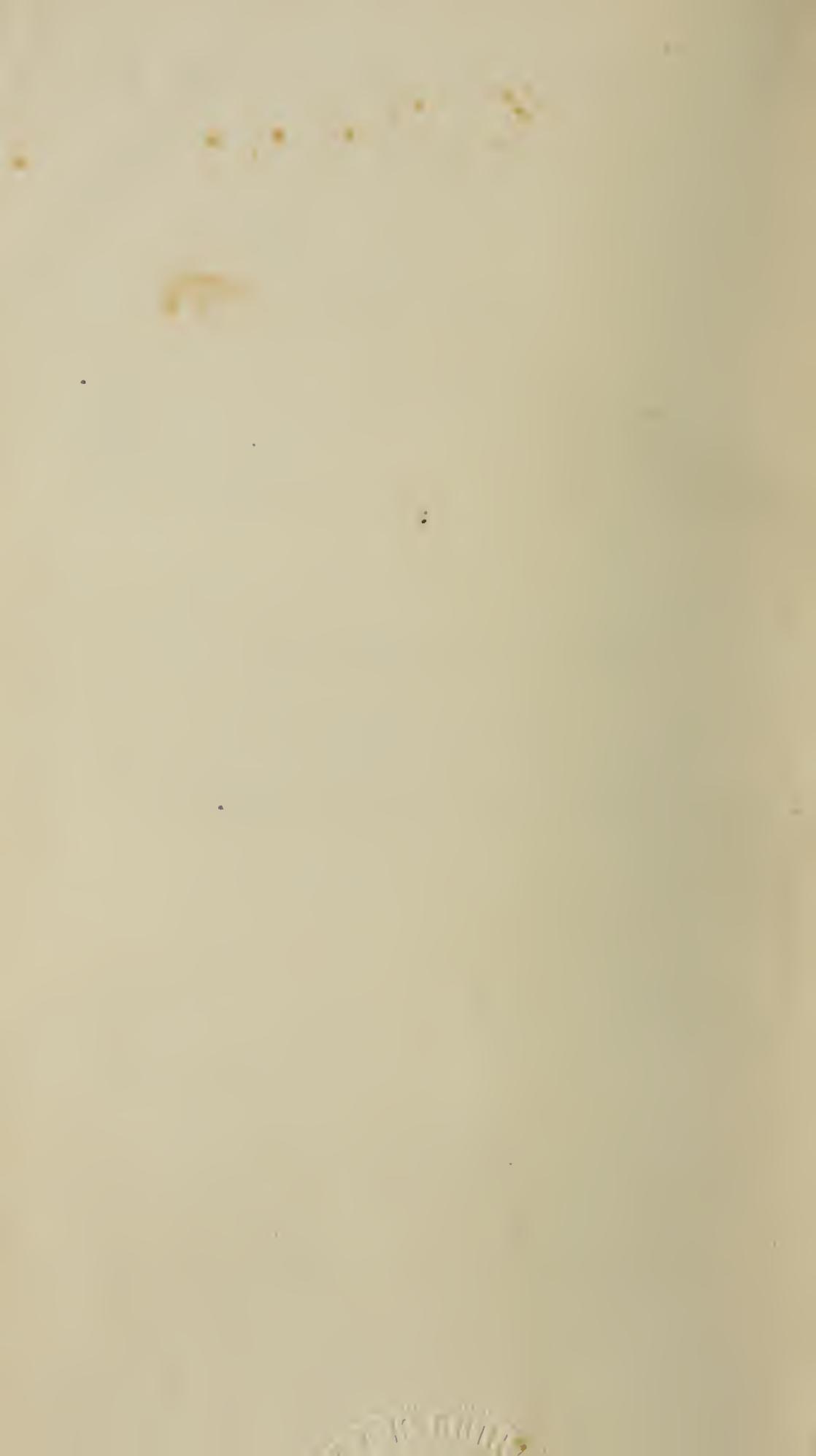
Virg.

We are all aboard for the West—

Sir George E. Cartier's Version.



VICTORIA, B. C. :
PRINTED BY RICHARD WOLFENDEN, GOVERNMENT PRINTER.
1872.



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CHAPTER I.

BOUNDARIES, AND GENERAL GEOGRAPHY.

BRITISH COLUMBIA sprang into existence, as a Colony, only in 1858, consequently on the gold-discoveries, the rumours of which in that year suddenly attracted numbers to its shores. Previously it had been traversed and partially occupied only by the Fur-traders, first of the North-West, and afterwards of the Hudson's Bay, Companies; by whom its various divisions were distinguished by different names, most of which are still retained for local designation. The adjacent Island of Vancouver, separated from the mainland by a narrow channel, in its narrowest part scarcely exceeding a few thousand yards, had been partially colonized some years before; and it might have been reasonably supposed that these two adjacent and almost contiguous lands, with interests so closely united, would have been incorporated under one Government. But the wisdom of Downing Street willed it otherwise. Established as separate Colonies, each enjoyed for some years the honor of paying its own highly-salaried Governor, under the Imperial auspices; with the dignity of enacting its own special laws, not always in strict observance of the interests of its neighbour. Of course this could not last; and in 1866 the common-sense of the two Colonies, though reluctantly elicited, brought about a union. Subsequently, on the 20th July, 1871, the united Colony became confederated as a Province of the Dominion of Canada.

It is as a sequel to this last-named event, and in view of the rapid advance of the most important interests of the country under its new connexion, that the Provincial Government has judged it expedient to invite the production of

such information as may meet the enquiries of the industrious settler whose views tend hitherward. It will, then, be the object of the following treatise to present, in a brief and compendious form, such general account of the country and its resources as may seem appropriate to the end in view.

The limits of the Province may be thus broadly indicated. Co-terminous on the South with the United States Territory of Washington, the 49th Parallel of North Latitude forms the boundary from the Gulf of Georgia to the summit of the Rocky Mountains, which it intersects in Longitude 114° West, there touching on the Dominion territory of the North-West. Thence along the summit of the Rocky Mountains to the parallel of Mount St. Elias, in about Latitude 62° . Thence Southward as far as $54^{\circ} 40'$, along the strip of coast-line, ten marine leagues in width, formerly occupied by Russia, recently purchased by the United States, and now forming part of the Territory of Alaska. Thence Southward to the entrance of the Strait of Fuca, including Queen Charlotte and Vancouver Island, and the vast archipelago connected therewith.

The three principal streams of British Columbia are, the Columbia, the Fraser, and the Peace. The last-mentioned, rising in the angle formed by the Peak Range with the Rocky Mountains and the Coast Range, after receiving the important gold-bearing tributary, Findlay's Branch, breaks through the main line of the Rocky Mountains, and, passing onwards, joins the great River Mackenzie : the united flood, after a course of some two thousand miles, eventually falling into the Frozen Ocean.

The Columbia, rising in the Rocky Mountains, pursues a Southerly course, and, after receiving several important tributaries, and feeding the two extensive sheets of water called the Arrow Lakes, enters the United States Territory in Latitude 49° ; and after a course of nearly a thousand miles, falls into the Pacific in Latitude $46^{\circ} 20'$.

Fraser River, comparatively the smallest, but in its relation to the Province by far the most important, flows entirely through British Columbia, entering the Gulf of Georgia a few miles North of the Boundary Line of 49° , and in about $122^{\circ} 40'$ West Longitude; its course throughout being nearly parallel with that of the Columbia. The main, or central, branch takes its rise in the Rocky Mountains in Lat. $53^{\circ} 45''$ N., Long. 118 W., there heading with the Rivière de Miette, a tributary of the Athabasca, which afterwards unites with Peace River in its course towards the Frozen Ocean. Fraser River was first discovered by Sir Alexander Mackenzie of the North-West Company, who, designating it as the *Tâ-cout-ché Tesse*, or River of the Tâcullu nation, descended it for some distance on his way to the Western Coast in 1793. Afterwards, in 1808, it was navigated to its mouth by Mr. Simon Fraser and Mr. John Stuart of the North-West Company; from the former of whom it has its present name. Fraser River, a few miles from its source, flows into a lake some miles in length called Cow-dung Lake, below which, considerably increased by a tributary from the north, it enters Moose Lake, a beautiful sheet of water some nine miles in length. Thence the river continues rapidly to Tête Jaune's Cache, being joined midway by a second feeder, likewise from the North.

Tête Jaune's Cache,* distant about 70 miles from the summit of the Rocky Mountains and 730 from the sea, is the limit of canoe navigation on the Fraser. About three miles lower down, the stream is joined by the Cranberry Fork, a tributary flowing from the South, which heads in with the North Branch of the Thompson, to be presently noticed, and the Canoe Fork of the Columbia.

Between Tête Jaune's Cache and Thle-et-leh, where there is a post of the Hudson's Bay Company called Fort George,

* Named after an Iroquois trapper attached to the North-West Company, who formerly frequented this neighbourhood—called the Tête Jaune from the lightness of his hair.

the river is augmented by many tributaries ; two of which, the Mackenzie Fork and Bear River, are of considerable magnitude. This point is in Lat. $53^{\circ} 53'$, Long. $122^{\circ} 45'$. An important branch here falls in from the Westward, proceeding from the Lakes of Stuart and Fraser. Quesnel's River, issuing from the great lake of the same name, flows in 100 miles lower down ; and 40 miles below this is Fort Alexandria, seated on the right bank in Lat. $52^{\circ} 33' 40''$.

It is in the mountainous region comprised within the great bend which the Fraser makes between Tête Jaune's Cache and this point, that the rich gold-deposits, known as the Caribou mines, are situated.

At Lytton, about 180 miles from the sea, the Fraser is joined by Thompson's River,* a copious tributary flowing from the Eastward. This stream waters an important and extensive section of the country ; its northern branch heading with the Cranberry Fork, before mentioned.

Yale, a small town at the head of steam-boat navigation on the Lower Fraser, is 57 miles lower down ; and New Westminster, the former capital of the mainland, some 95 miles below it. This last-named town, pleasantly situated on the northern bank of the river, some fifteen miles above the entrance, and in Lat. $49^{\circ} 12' 47''$, Long. $122^{\circ} 53'$, is, practically, the head of ship-navigation on the Fraser.

For brevity's sake the names of the various extensive feeders, falling in at intervals from Fort George downwards, are omitted. Of these the Chil-côh, watering the fertile tract occupied by the Chilcotins, and entering on the right about 60 miles below Alexandria, is one of the most conspicuous. The Harrison, joining also from the right, is another. This stream flows by a short course from a picturesque and extensive lake ; and was at one time the chief route of communication with the upper country ; its continuation again striking

* Named after the late David Thompson, Esquire, formerly Astronomer to the North-west Company.

the Fraser some 40 miles above Lytton, at the beautiful village of Lillooett.

In order to a due apprehension of the geography of British Columbia it is necessary to indicate the ranges of mountains which divide its several portions.

The more Southerly part is separated from the Columbia watershed by the Cascade Range, so called from the rapids of the Cascades upon the Lower Columbia; the point where that river bursts through the chain. This range may be considered as a continuation of the Sierra Nevada of California, and it vanishes at the junction of Thompson's River with the Fraser.*

The Coast Range (i. e. the chain of mountains lying between the interior of the Province and the sea-board) commences above New Westminster, and extends, parallel with the coast, as far as Mount St. Elias at the northern extremity.

CHAPTER II.

THE COAST, VANCOUVER ISLAND, &C.

Having traced the main artery of the Province from its origin to the sea, we may now proceed to notice the Coast region, with its insular appendages, and chiefly the important island of Vancouver.

A reference to the map will show that the North-West

* The designation "Cascade Range" has been applied by the Officers of the Royal Engineers, and some others, to the whole system of mountains in British Columbia except the Rocky Mountains. The writer thinks, however, that on reconsideration these gentlemen will agree with him in the classification he has always advocated, not only as calculated to avoid confusion, but as being geographically accurate.

Coast, from San Francisco upwards as far as the Strait of Fuca, presents a line remarkably free from indentation. Thence northward, however, the coast is broken up into a perfect maze of inlets, forming in their ramifications countless islands of greater or less extent. The minute exploration of this extraordinary archipelago by Vancouver, in the years 1791-93, has given us maps the accuracy of which under the circumstances has excited the admiration of succeeding navigators. Outside of the archipelago lie two principal islands, Vancouver and Queen Charlotte, divided from each other by a broad sound, and extending from the Strait of Fuca on the South to the frontier of Alaska on the North. The southern island, named by the explorer *Quadra and Vancouver's Island*, after the Spanish Commander then on the station and himself, formed originally, with its dependencies, the Colony of VANCOUVER ISLAND. It extends in a north-western direction from Lat. $48^{\circ} 20'$ to Lat. 51° , in length nearly 250 geographical miles ; its greatest breadth, opposite to Nootka, being about seventy. Victoria, the seat of Government and Capital of the Province, is situated near the south-eastern extremity of the island, where the adjoining Strait of Fuca is about seventeen miles in breadth. This strait, extending into the United States territory by the inlet terminating in Puget Sound on the south, expands northward into the Gulf of Georgia, which extends to Lat. 50° . This portion of the dividing channel in no part exceeds 20 miles in width ; contracting afterwards into Johnstone's Strait, which, at the narrowest part, does not exceed two miles.

Before recurring to the consideration of the mainland of British Columbia, or entering on the topics which apply equally to both divisions, it may be well to note some particulars respecting the older portion of the Province. Victoria, its capital town and chief sea-port, above casually alluded to, is in Lat. $48^{\circ} 25' 20''$ N., Long. $123^{\circ} 22' 24''$ W., distant about 70 miles, or six hours' steamer travel, from New Westminster on the Fraser ; three hours from Port Towns-

end, the Port of Entry for Puget Sound in Washington Territory; and about 750 geographical miles, or from three to four days' voyage of steamer, from San Francisco in California. The position of this rising city, both as a distributing point for the Province at large, and as a nucleus for foreign trade, is thus extremely favorable: and the fact of its being the first available sea-port north of San Francisco confers on it additional importance. The town itself is seated on the narrow inlet of *Camosae*, which, completely land-locked, gives accommodation to all vessels whose draught of water does not exceed eighteen feet. Larger vessels discharge at Esquimalt, three miles distant; an extensive harbour capable of receiving vessels of the largest class, and destined, apparently, to be, in connexion with the projected Railway across the Continent, the future entrepôt of a national commerce, the extent of which it is not easy to foresee. Esquimalt is the station of Her Majesty's ships on this portion of the Coast. Here are the naval yard, the hospital, and other necessary appendages for the requirements of the squadron. A graving dock is in contemplation, capable of admitting ships of the largest class, tenders for the construction of which have been invited by the Provincial Government: and every thing indicates improvement of a permanent and substantial character. An excellent macadamized road connects the two harbours.

The situation of Victoria is very beautiful, and the town boasts of some good streets, with fine drives, over excellent roads, in various directions. Adjoining the town a large extent of ground has fortunately been reserved for a public park. This picturesque locality, known as Beacon Hill, borders on the Straits; and on the opposite shore tower in grand outline the snow-clad summits of the Olympian Range. Here is the public race course; and here the cricket-matches are played; when the fleet against the towns-men, or the married men against the single, compete for honors. On the outskirts of the town are many attractive residences: and

*not sun
temperate
still bushy
my view
mine is on*

usually and
and deficiency
very queer
all a confusion
Stone
firms deal in
concretes
every cottage displays its pretty garden, cultivated frequently with no small degree of horticultural taste. Though Victoria can so far boast of no edifice of high architectural pretension, there are many neat and substantially-constructed buildings. Among these, though in rather florid taste, may be mentioned the Provincial Offices on James' Bay. We may also mention the Presbyterian, Wesleyan, and Roman Catholic Churches; the iron church of St. John, a donation to the Episcopalian congregation of the Province from that excellent lady, the Baroness Coutts; the Angela College for young ladies, likewise originating in the beneficence of the same lady; the St. Anne's Convent, and Orphan School; the large hall occupied by the Mechanics' Institute; the Bank of British North America; the St. Nicholas Hotel; the Alhambra; and the fine hotel recently completed, called the Driard House. Various public buildings, to be built by the Dominion Government, will shortly be erected; and the Episcopalian Cathedral of Christ Church, occupying the conspicuous site of the former building destroyed by fire, is in progress. Some of these projected buildings, it is to be presumed, will be of a higher order of architecture than the majority of those hitherto constructed.

About seventy miles from Victoria, on the eastern, or inner, shore of the island, is Nanaimo, a small town of local importance, originally established in connexion with the coal-mines wrought in that vicinity, and around which other interests have sprung up. Among these may be mentioned the quarrying and exportation of stone for architectural purposes. There is a deficiency of good stone along the coast, until this vicinity is reached: consequently the United States Government, when recently about to construct a Mint in San Francisco, contracted to get the material from Newcastle Island, near Nanaimo. This contract, the stone having been hewn before shipment, is now nearly completed, and will probably be followed by others of a similar description. Nanaimo is a thriving little town, and, having substantial resources of

a permanent character, will doubtless continue to flourish.

Comox, some forty miles higher up on the same shore, is an agricultural settlement, prosperous and contented. It is situated at the mouth of a stream of the same name,* and possesses a very productive soil. There are said to be great indications of coal here, and elsewhere in the vicinity.

Cowitchan, situated between Nanaimo and Victoria, upon a river of the same name, is a flourishing agricultural settlement. In the same district are Chemainis, and Salt-spring (or Admiralty) Island, also agricultural and pastoral in their character.

Victoria District occupies the peninsula, at the base of which is the town of Victoria. It embraces many fine and valuable farms, and includes the settlements of Lake and Saanich. The latter, especially, forming the extremity of the peninsula, is a fertile and beautiful tract.

Passing Esquimalt westward, along the Strait of Fuca, are the settlements of Metchosin and Sooke, of an agricultural and pastoral character. Near Sooke are gold-diggings, which, though not excitingly attractive, give earnest of something better, and meanwhile yield a moderate income to the few who occupy themselves in the quest.

Upon the Outer or Western Coast there are at present no agricultural settlements; the business prosecuted there being only the traffic with the natives for oil and furs. In Alberni Inlet, Barclay Sound, are extensive saw-mills, erected at large outlay by an English firm; but they are not at present in operation. At the northern end are the Saw-quash coal-mines; but they are only partially wrought for the casual supply of passing steamers, and cannot, it is to be presumed, be brought into competition with those in the more accessible position of Nanaimo. Fort Rupert, a post of the Hudson's Bay Company, is in this neighbourhood.

It is not, however, the intention to enter into minute local particulars; but rather to indicate broadly the general features of the country, and afterwards to refer to special points

* Sometimes called the Courtenay River.

when necessary. While the coast-line of Vancouver Island is well known, the interior has been very partially explored. A mountainous ridge appears to traverse it lengthwise, in which are certain depressions occupied by extensive lakes ; and it is probable that much agricultural and pastoral country remains yet to be developed. So far the portions that have been taken up along the inner sea-board are found to be extremely fertile and easily brought into cultivation. Little necessity for clearing, save partially in spots, has yet existed ; but, the more open grounds being first occupied, the use of the axe will become constantly more necessary in this division of the Province. Within the limits of the mountains rich mineral deposits are known to exist. Coal is found in several positions, and timber of the finest quality occupies the forest tracts. But on these and other points more will be said hereafter.

Queen Charlotte's Island, considerably smaller than Vancouver Island, is generally of a mountainous character, its shores presenting, however, spots well adapted for the cultivation of the potato and other vegetables. But it is as a mineral region that this island has chiefly to be considered ; and as such it will, it is believed, eventually prove extremely valuable. Gold-bearing quartz of very rich quality was extracted at a point called Mitchell's Harbour, as far back as 1852 ; but for various reasons the quest of this metal has never been vigorously prosecuted in this locality. Copper and other ores exist ; and a fine vein of anthracite coal, said to be of a superior quality, has been partially wrought, but the working is at present suspended. Want of capital is alleged to be the cause why this last enterprise has not been prosecuted to a more successful issue.

Fort Simpson, a post belonging to the Hudson's Bay Company, is situated near the entrance of Observatory Inlet, close by the southern frontier of Alaska. Methlakâthla, a missionary settlement under the supervision of the ~~Rev.~~ Mr. Duncan of the Church Missionary Society, is situated some

30 miles to the southward of it, at a point known formerly to navigators as Pearl Harbour. Near this, at the entrance of the Skeenâ River is Port Essington, in Lat. $54^{\circ} 15'$; a newly established settlement, to which further allusion will be made, with reference to the recent gold-discoveries on Peace River.

A cursory reference to the map will show the almost numberless islands of all dimensions which compose the remainder of this extraordinary archipelago, and of which no special mention can of course be attempted. Many share, doubtless, to a greater or less extent the attributes of their larger outlying neighbours: and all participate in the facilities for securing the teeming products by which, as will be seen, the maritime waters of the Province are notably distinguished.

CHAPTER III.

GEOGRAPHICAL SUBDIVISIONS OF THE MAINLAND.—GENERAL CHARACTERISTICS OF EACH.—LINES OF COMMUNICATION, &c.

The mainland of British Columbia, apart from the seaboard, may be divided into three sections, each differing from the other in its attributes. The first extends from the mouth of Fraser River to the head of the Rapids above Yale: the second, from that point to Alexandria: the third, thence to the Rocky Mountains.

The characteristics of the lower district are a surface thickly wooded in most parts with trees of enormous growth, chiefly varieties of the Fir and Pine, and intermixed with the Red Cedar (*Thuja Occidentalis* of Douglas, *Gigantea* of Nuttall) and the Maple-plane (*Platanus Acerifolia*). Low alluvial points fringe these thickets. These, as well as the

numerous islets along the river, are covered with Aspens, Balsam Poplars, and Alders, of luxuriant growth. In the lower part are some extensive meadows, yielding, in their natural state, heavy crops of a coarse but nutritious grass, and, under cultivation, enormous returns of cereals and other produce. For a certain period of the year mosquitoes are troublesome along the river, as high, nearly, as Hope: but there has never been manifested any symptom of fever and ague, or other similar endemic, so often generated in positions of a like description.

On the verge of the second, or central, division a marked change commences. The copious rains which fall in the lower district are greatly modified after we pass the mountainous ridge through which the river bursts near Yale. Evidences of a drier climate appear at every step. The character of the vegetation changes. About Lytton the Cactus begins to appear. In spots along the Thompson the Artemisia, and other shrubs indicative of a dry and hot climate, are found: and in lieu of the thickly-wooded luxuriance of the lower region, a succession of open valleys, covered with fine pasture and bordered by grassy hills in parts more or less wooded, delights the eye of the traveller. Here and there belts of forest intervene; amid which broad expanses of open land lie scattered at intervals. This general description may be regarded as applying to a very large tract of country, extending from Alexandria on the Fraser, in Latitude $52^{\circ} 33'$, to the Southern Boundary Line on the Okinagan River: and thence at intervals towards the south-eastern angle of the Province. Near the point just mentioned, where the Boundary Line intersects the Okinagan River flowing into the Columbia, the country begins to assume, in its general features, a very sterile character. An arid sandy region, almost tropical in its temperature, replaces the rich scenery through which we have been passing. Crossing the frontier into the United States Territory, as we descend the Okinagan towards the Columbia, this character

becomes more general. The alluvial bottoms alone, where there is natural irrigation, are susceptible of culture: the main feature of the prospect is a torrid waste of sand, in which the Wormwood and other varieties of the Artemisia, the Cactus, and other vegetation proper to similar wastes of remote volcanic and diluvial origin, alone find nutriment. We have entered, in short, upon the North-western angle of the GREAT AMERICAN DESERT: and hence, within the Nevada range, to beyond the frontiers of Mexico, these vast "Sage Barrens" lie extended before the traveller.* Let us recede, however, from this uninviting field, and confine our view within the more attractive limits of our own favored Province.

The third division of British Columbia, from Alexandria to the Mountains, varies materially from the other two. The agricultural region, properly so called, may be said to terminate in the vicinity of Alexandria; though there are many small spots beyond that point which may be advantageously cultivated for culinary vegetables and the harder cereals. Generally speaking it is a wooded country, through which many open spots of excellent soil are interspersed, with large tracts of luxuriant pasture—especially in the direction of Fraser and Stuart Lakes, and in the Chilcotin country. From Fort George, however, up the main branch of the Fraser to Tête Jaune's Cache, none of these open places appear: and though many cultivable patches along the river banks might in parts be readily cleared, it is probable that the occurrence of summer night-frosts would prevent the growth of any save the hardier vegetables. Fraser Lake, however, and the neighbouring lake of Stuart, have been for many years the scene of agricultural operations on a small scale, at the Posts, formerly of the North-West, and since the coalition of 1821, of

* The prevalence of the scented Artemisia ("Sage" of the American trappers) upon the Southern Branch of the Columbia River, led the early Spanish colonists of California to call it the Rio del Orégano, or River of the Marjoram: hence the origin of the term *Oregon* since applied to the whole territory.

the Hudson's Bay Company. At the former place, especially, these limited operations were invariably successful. Potatoes, turnips, and other vegetables thrived wonderfully. Barley yielded invariably a heavy return; and though wheat was cultivated occasionally only, on a very small scale, and rather experimentally than as a crop, it ripened well in favorable positions. The pasture in these vicinities is of the most luxuriant description, consisting of fine natural grasses intermixed with a nutritious kind of wild pea, or vetch. Cattle and horses of course thrive well; but the necessity of providing fodder against the lengthened winter of these elevated parts, discourages their being raised beyond a limited extent.

This upper region, however, is to be considered more especially as the *mining district*: and any partial cultivation that may be attempted to meet an extended market in connexion with the mines, must be regarded only as subsidiary to the main supply, derived from a remoter source.

We have deferred to notice the Lakes which are dispersed throughout the interior of the Province, and which constitute one of its most charming characteristics—for British Columbia is emphatically a Land of Lakes. It would be a vain attempt to describe the beauties of many of these superb sheets of water: and impossible to enumerate even a tithe of their number. In the aggregate there are many hundreds, varying in dimensions from seventy miles and upwards in length, by four or five miles in breadth, to the mere mountain tarn of a few acres in extent. Abounding with fish, the water of these lakes is generally very pure. In some, however, where the outfall is deficient, there is an alkaline taint, arising from the presence of the sulphate and other combinations of soda. Of this condition Green Lake, situated between Alexandria and Thompson's River, is a notable example. About thirty miles in length, with a beautiful grassy shore, it has no outlet save very partially by underground drainage in the direction of the Bonaparte, a tributary of the

Thompson. It is consequently very strongly impregnated with the accumulated salt; its colour being at the same time a fine sea-green.* Of the principal Lakes the following may be mentioned. On tributaries of the Fraser: Stuart's Lake and Lake Tatlâ, Fraser's Lake, Lac des Français, Bear Lake, Quesnel and Caribou Lake, Lake Chilcotin, Lac à la Hache, Lakes Anderson and Seton, Harrison's Lake, Pitt Lake, near New Westminster; the upper and lower Shewshwap Lakes on Thompson's River; Horse Lake and Lac des Rochers on the North Branch. On the Columbia water-shed the great Okanagan Lake and the Osoyoos; the Arrow Lakes; the Great Lake of the Arcs-plattes on the Kootanais Branch. On the waters of Peace River, McLeod's Lake &c. Close to Stuart's Lake, and connected with it by a waggon road nine miles in length passing over a depression in the Coast-range, is Nâtâ-punkat, or Babine Lake, a sheet of water of the first magnitude heading a branch of the River Skeenâ: and on a tributary of the same stream flowing from the northward is Connolly's Lake; on both of which are posts of the Hudson's Bay Company.

It will be enquired what facilities of communication exist by which the extremes of the vast tract of country composing the interior of British Columbia are connected. Putting aside the artificial roads that have of late years been constructed, and to which reference will presently be made, it may be mentioned that from immemorial time a system of roads or rather trails, has existed throughout, which, originally traced by the natives for mutual intercourse, served, until recently, for all the purposes of communication and transport.

*Captain R. M. Parsons of the Royal Engineers, in his report to Colonel Moody, of the 16th September, 1862, says of this and other similar Lakes "I did not examine the water of these Lakes, but they probably contain the same impurities as those met with when travelling with you near Okanagan, viz: Sulphur, Carbonic Acid, Soda (as Sulphate of Soda or Sulphide of Sodium and Carbonate of Soda) and common Salt, probably derived from decomposing trachyte in the soil."

These pack-trails—for they were nothing more—have since been improved, where necessary, so as to admit of the passage of wheeled vehicles along the principal lines. In some parts long tracts required no improvement and were at once available for all the purposes of transport: and such natural roads, with interruptions more or less frequent in parts, radiate throughout the valleys, affording ready communication between various points with pack-animals, and improvable with moderate outlay of labour into roads of a higher description.

The artificial improvements which have become necessary since the colonization of the Country, in order to give access from the Lower District to the interior, are of the most imposing character; and have involved an outlay which, at the outset, bore hardly upon the resources of the Colony. The first road opened with this view, commenced in 1858, and for some years affording the only available route of access, was from Douglas, at the head of steam-boat navigation on Harrison Lake, round by the Lakes Anderson and Seton, to Lillooett on the Fraser, some 40 miles above Lytton at the Forks of Thompson's River. This road, however, though all-important for the time, and destined probably yet to become of renewed expediency, was after a while superseded by that which is now the main channel of communication. Commencing at Yale, the head of steam-boat navigation on the Lower Fraser, this last-mentioned road is continued clear up to Barkerville, in the heart of the Caribou mining-region. The lower portion, crossing the Fraser at Kequeloose 13 miles above Yale by a suspension bridge, is conducted along the river through a most difficult country to Lytton. Enormous engineering difficulties have been overcome in this great work, completed under the supervision of the Honorable Joseph W. Trutch, the present Lieutenant-Governor of the Province. A second bridge, upon piles, crosses the Thompson some distance above Lytton, after which the difficulties were of minor importance.

A third route, crossing directly over the Cascade Range in an Easterly direction to the beautiful valley of the Similkameen

on the Columbia watershed, leaves the Fraser twelve miles below Yale, at the pleasant village of Hope. This, though not opened of breadth sufficient for wheeled-vehicles, is valuable as a short route of transport with pack-animals, in the direction of Okinâgan and the Kootanais mines.

Since the discovery, two years ago, of the gold-diggings on the heads of Peace River, called now the "Omineca" mines, another route has been opened from the northern coast. Leaving the village at Port Essington, to which I have before passingly alluded, the Skeenâ River is ascended by canoe to the Bear-river Fork; thence by land-carriage and water by way of the Babine Lake and over a depression in the intervening Coast Range to Lake Tat-lâ on the Stuart Branch of the Upper Fraser; and thence across the ridge of the Peak Range to the head waters of the Findlay Branch of Peace River, where the gold-deposits are in process of development. This route has the advantage of shortness of land-transport, over the route to the same point by the way of Yale: but each appears to have its advocates, and the balance of their relative merits seems to be yet undecided. Leaving, however, the subject of internal communication to be reverted to hereafter, we proceed to notice some of the natural productions of the Province.

CHAPTER IV.

NATURAL PRODUCTIONS—TIMBER, TREES, ORNAMENTAL SHRUBS, &c.

The forests of British Columbia are productive of an inexhaustible supply of timber of the most serviceable kind. Confining the description to very narrow limits the following varieties may be mentioned:—

The Oak, which is not found on the mainland,* grows abundantly on the southern parts of Vancouver Island, and the islands adjacent. It is of the variety *Q. Garryana*; and, though nowise equal to the British Oak, affords a very tough and serviceable timber.

The Douglas Pine or Fir (*A. Douglasii*). The uses of this tree, which grows to a gigantic size, are chiefly for the manufacture of deals and scantling for building purposes, and also, locally, for ship-building. It is peculiarly well adapted for masts and spars, from its size, straightness, and tenacity. There is a large and constantly increasing exportation of this timber, from British Columbia, and the adjacent shores of Washington Territory, in the shape of sawn lumber and spars to various Ports in China and the Pacific, and in spars and masts of the largest dimensions to Europe. The quality of the lumber procured in British Columbia, at Burrard's Inlet, a little north of the entrance of Fraser River, is esteemed of superior quality, and commands, we believe, an extra price in San Francisco.

The Weymouth Pine (*P. Strobus*)—the White Pine of commerce. This valuable tree is common on the mountain-slopes between the Coast and the Lower Fraser. It is especially abundant in the upper part of Harrison's River, where it attains to a large size and is of unsurpassable beauty.

The Balsam Pine, yielding the “Canada Balsam” of the druggist: a tree of vigorous growth and very ornamental, but the timber of little value.

The Hemlock Fir (*A. Canadensis*). Common throughout the Lower District and along the Coast. The bark valuable for tanning; the wood valueless for outside purposes, but used sometimes for indoor finishing as a substitute for better wood.

* This remark, as a rule, is strictly correct; but like all rules has its exception. A few oaks of small size may be discovered—or might have been discovered 20 years back—on the eastern bank of the Rapids above Yale. They did not probably exceed a dozen in number; and, unless they may have been considerably spared for their rarity, it is questionable whether any now remain.

The Spruce Fir. Found in most localities throughout the Province, up to the limits of the Rocky Mountains. An easily wrought and useful wood. (*A. Menziesii.*)

Pinus Banksiana, a variety of the common Scotch Fir, is found in dry sandy woodlands throughout the interior of British Columbia, and up to the summit of the Rocky Mountain passes. A useful and durable wood. Found also on Vancouver Island; but more rarely, and of smaller size.

The Red Cedar (*Thuja Occidentalis*, or *Gigantea*). A most useful tree, found throughout the Province, up to the heart of the Rocky Mountains, but especially abundant on the Sea-board and in the Lower District, where it attains to an enormous size. The wood of this tree is especially valued for its extreme durability; and for this reason is now in demand in San Francisco for the purposes of the Southern Pacific Railroad, for ties. Of this wood the natives make their beautiful canoes; the broad sheets of the bark they use frequently for roofing; and its fibres are woven into blankets.

The Cypress, or Yellow Cedar (*Cupressus Thyoides*), confined to the maritime precincts. The wood, of close texture and applicable to many useful purposes, is of very superior quality. The tree is not, probably, found south of 49° , and extends along the Coast into Alaska. The inner bark of this tree contains an essential oil, which communicates its odor, somewhat as of garlic, to the wood, the effect of which is to protect it, it is said, against the attacks of the Teredo. This quality of resistance, added to great durability, adapts it specially for submarine purposes, for which, imported from Alaska, it is now I believe highly valued in San Francisco. The cortical fibres, like those of the last-mentioned, are spun, and woven into blankets, but of a finer texture.

A variety of Yew (*T. brevifolia*) is found along the Coast, and on the Fraser as high as the head of the Yale Rapids. It is used by the natives for the manufacture of bows, and it is applicable to various useful purposes, but does not attain to the size of the English Yew. The Alder, useful for turning

and carving, is widely distributed, and in the Coast vicinity attains to a great size. The Plane-maple (*Platanus Acerifolia*) is abundant in the Lower District and Vancouver Island, and of very vigorous growth. A useful and highly ornamental tree, yielding in early Spring a copious supply of sap, which, though less rich in saccharine matter than that of the Canadian Sugar-maple, gives a product not inferior in quality. The Balsam Poplar, or Cotton-wood, and the Aspen, growing abundantly along the Lower Fraser, are very generally distributed, nearly to the summit of the Rocky Mountain passes. From the Balsam Poplar, which attains to very considerable dimensions, excellent canoes are excavated by the Indians of the interior, which have this advantage over those constructed of Cedar, that they do not split through exposure to the sun, and consequently do not demand the same assiduous care. But these periguas are nowise comparable in form to the beautiful canoes of the Coast, formed of the more delicate material, and with a far higher degree of art. The Birch, which is the chief hard-wood of the interior, is comparatively rare in the Lower District and on Vancouver Island; but throughout the Upper Fraser, up to the verge of the Rocky Mountains, it is common, and attains in parts to a very considerable size. The bark of this tree was formerly employed at the interior posts for making canoes for transport;* but boats were afterwards substituted. The natives do not employ it, however, for that purpose, like those of the eastern Continent. They construct their light hunting-canoes of single sheets stripped from the trunk of the Weymouth Pine, where procurable: elsewhere of the Spruce.

Peculiar to a portion of the Central District is the Red Pine (*P. Ponderosa*); a very beautiful tree, growing chiefly in gravelly opens, and attaining a large size. The timber is good, close-grained, and durable; but, as its name indicates, comparatively heavy. It is found commonly as far north as the upper ford of the Bonaparte; but its nearest approach to the Coast Range, westward, is the head of Anderson Lake.

A variety of the Larch (*L. Occidentalis*) is found at various points along the eastern portion of the Southern Boundary of the Province. It grows to a large size, chiefly in cold moist bottoms; but, though a beautiful tree, its timber does not share the character for durability ascribed to its Eastern congener. Some other varieties of Pine besides those that have been mentioned are found in the mountainous parts: but none of these being of marked utility it is needless to enumerate them.

Of ornamental shrubs there is a considerable variety. Of these a few only will be mentioned. A species of the Arbutus (*A. Laurifolia*), which by the way it is wrong to class as a *shrub*, is found abundantly on the shores of Vancouver Island, and elsewhere in the southern part of the Coast Division. It grows to a considerable size, sometimes being found with trunks eighteen inches or more in diameter. The Red-flowering Currant (*R. Sanguinea*) grows abundantly in the same localities. A species of the Juniper, attaining rather to the dignity of a tree, is likewise found in immediate proximity with the sea-shore. In the Cascade Range, behind the village of Hope, a fine Rhododendron (*R. Ponticum?*) ornaments the slopes in the neighbourhood of the height of land. The Syringa, or Mock-orange (*Philadelphus Multiflora*) sheds its fragrance through the woods of Vancouver Island, and is common on the mainland both east and west of the Cascade Range, and nearly to Thompson's River. A fine *Spiraea*, rather a lofty shrub, is found in the woodlands around Victoria and elsewhere, which, besides the elegance of its flowers, is noted for producing probably the toughest known wood for ramrods. The Holly-leaved Barberry (*Mahonia Aquifolia*) is very generally diffused; and in addition to the beauty of its flowers, has the merit of producing a fruit valuable for preserving.* Upon the summit of the Cascade Range, and elsewhere in corresponding positions, are thick beds of the *Menziesia*, white and red. This plant, strongly resembling in appearance the Heath of Europe, has frequently been mistaken for it: but it

* The roots of the *Mahonia*, yielding a rich yellow dye, and produced in large quantities, will probably be found to have a commercial value.

is, I believe, a well-established fact that no true Heath has yet been found indigenous to any part of America.

Of edible fruits there are many kinds. Of these perhaps the most important is the Service-berry (*Amelanchier Racemosa*, or *Canadensis?*) ; a white-flowering shrub yielding a fruit of great utility. Abundantly produced, and easily gathered, this fruit is dried in the sun, and forms an important addition to the winter store of the natives, as well as of the European residents, by whom it is no less prized. This berry is very widely distributed between this and Manitoba; and along the Saskatchewan the dried fruit enters largely into the composition of the finer kinds of Pemican. Though the shrub grows freely about Victoria the fruit produced is there of indifferent quality. Between Thompson's River and the Southern Boundary, and especially along the valley of the Similkameen, it attains its highest degree of perfection. The Cluster or Choke-Cherry thrives in the same localities as the Service-berry, and is little less abundant. At first harsh and astringent to the palate, this fruit when fully matured is sweet and well-flavoured. The Sallal (*Gualtheria Shallon*) is a well-flavoured fruit, borne in bunches by a low evergreen shrub, the undergrowth of woods in the Coast neighbourhood only. Several varieties of *Vaccinium*, or Whortle-berry, some confined to the Coast and its immediate confines, others very generally distributed, as high as the Rocky Mountains, are also found : besides the Raspberry of several kinds, including one identical in flavour and nowise inferior in quality to the cultivated varieties ; the wild Strawberry ; and the Cranberry ; all widely distributed, and the last an article of considerable export from the Lower Fraser to San Francisco, where the fruit is in great demand. One might extend, however, indefinitely this hasty enumeration ; but it is time to turn to other objects. Let it suffice, then, to say, in conclusion, that here in British Columbia Nature has been profuse in her gifts ; and that while providing abundantly for the more solid wants of Man, she has not been

unmindful of those minor luxuries which to all are grateful. The copious feast prepared by her hand throughout the wilderness, and the varied beauties of the innumerable flowers that bedeck the plains, are but the earnest of those luxurious additions to her bounty, which the taste and the industry of Man have been introducing, and will continue to introduce.

CHAPTER V.

NATURAL PRODUCTIONS CONTINUED—FISH.

As may be surmised from the enormous coast-line, and the great extent of the inland waters, the FISH of British Columbia enter largely into the consideration of her resources. Of all the varieties frequenting the inland waters, however, the Salmon is the most important: and, as it will require a longer notice than the rest, we reserve it for the last. The varieties of Trout, in the next place, demand attention; and for want of more legitimate nomenclature, they will in most cases be distinguished by the native names, adopting those of the Tâculliy of the Upper Fraser, to the writer the more familiar.

The *Peet* is a red-fleshed Trout, frequenting the larger lakes, such as Stuart's and Fraser's. It grows to a great size, frequently exceeding 20 lbs. in weight, and in some positions, I have been assured, weighing as much as forty, though I have never myself seen any nearly so large. They are usually caught with hooks, baited with a small fish, during the season of open water. In early spring the natives catch them by making holes in the ice and roofing them over with pine-boughs so as to exclude the surface-light. In this way the fish, attracted by a lure, is readily detected and speared.*

* This device, it may be noticed, is merely a modification of the Norwegian water-telescope; and shows how readily Man, in exigency, arrives through different processes at a common end.

The *Shâ-pai* is another variety, equal in all respects to the last; but differing in appearance, its skin being marked with faint orange-colored spots, and the flesh having a yellowish tint.

The *Peet-yâz*, or Salmon-trout, resembling generally the ordinary trout caught elsewhere. There are, however, several varieties, differing in size and quality, as well as appearance, according to their habitat.

The *Talo-yâz* (i. e. Little Salmon), is a peculiar variety of Trout, of excellent quality, confined to certain lakes of the Upper District, and found, I think, in the Great Okinâgan Lake—a sheet of water abounding also in the larger species.

In addition to the hook and spear, weirs are employed to capture the various descriptions of Trout as they enter the rivers from the lakes to spawn. The gill-net, too, set in favorable positions, is employed for the smaller varieties. The artificial fly and the spoon-bait, which the angler bent on sport would employ, were of course unknown to the native fishermen, whose devices I have mentioned.

The White-fish (*Coregonus Alba*), by many esteemed the Prince of fresh-water fish, found generally throughout the northern continent, is common to most of the lakes in the upper part of British Columbia. It varies very much in size, and no less in quality, in different localities: a variation arising doubtless from the nature of their food. Thus the fish produced in Fraser Lake, though no larger, are in quality far superior to those of the neighbouring lake of Stuart; while those of the small lake of Yoka, in the depression of the Coast-range between the latter lake and Babine, are superior to both. Far excelling these, again, are the fish caught in a small lake near Jasper's House on the Athabasca, a little outside of the northern frontier of the Province. The White-fish of British Columbia probably average from two to three pounds only: elsewhere, in parts eastward of the Rocky Mountains, they are found much larger.

The Loche (*Gallus Barbatula*), called also the “Fresh-

water Cod," is found commonly in the lakes and rivers. The liver, like that of the true Cod, is the sole, or chief, depository of its fat. A fish on the whole of very little mark.

The Pike or Jack-fish, common on the East side of the Rocky Mountains, is not found in the British Columbia waters—and, I need not add, is not regretted.

There are immense numbers of Carp of several varieties. These, when they enter the streams from the lakes to spawn, commencing in April, are caught by the natives with ingenious weirs, and sun-dried in vast quantities.

The Sturgeon of British Columbia (*Acipenser transmontanus* of Richardson) differs widely in all respects from the common Sturgeon of the Atlantic (*A. Sturio*). This noble fish is common both to the Columbia and Fraser River; but does not by the former stream penetrate to the British Columbia frontier—interrupted, apparently, by the Kettle Fall at Colvile, near to which point some have been known to reach. The fish appears in Fraser River in early Spring, following the shoals of a certain small fish, called by the natives Oolâ-han, as they resort to the lower parts to spawn. The Western Sturgeon attains an enormous size: in the upper parts of Fraser River, about Stuarts and Fraser's Lakes, having been caught weighing as much as seven or eight hundred pounds. These fish do not, there is reason to believe, always return to the sea; but, finding abundant food in the upper waters, continue to dwell and propagate there, frequenting chiefly the neighbourhood of the two lakes mentioned, and probably other localities. Unlike the Salmon, which constantly deteriorate as they ascend, the Sturgeon conversely improve; and are invariably fatter when caught in the upper waters, than in the vicinity of the sea. On the Lower Fraser these fish are caught by the natives in a singular but very efficacious manner. A canoe, manned by two persons, one of whom acts merely to keep the light vessel in position, is suffered to drift along the deepest channel. The fisherman, seated in the bow, is armed with a jointed staff

which may be lengthened at pleasure, and to the end of which a barbed harpoon attached to a cord is loosely affixed. With this he feels his way, keeping the point of his weapon constantly within a short distance of the bottom. The fish, slowly swimming upwards, is detected by the touch ; and, instantly struck, is afterwards readily secured. In the Upper Fraser the bait is chiefly employed ; but in the larger eddies strong nets are found very effective. At the effluence of Lakes Stuart and Fraser, near which the Hudson's Bay Company's posts are situated, long stake-nets are set during Spring and Summer, by means of which a fish is occasionally caught, the more highly prized for its comparative rarity : for while the Sturgeon grows to larger dimensions in these vicinities, it is very much rarer than in the lower parts of the river.

The Salmon entering Fraser River are of several varieties, making their appearance successively at various periods from early Spring till the end of Summer. As a general rule it may be asserted that the earlier shoals are the stronger and richer fish. For clearness sake I shall confine my remarks chiefly to two principal varieties, called by the lower Indians *Saw-quâi* and *Suck-kâi*, by the upper Indians *Kase* and *Tâ-lo*; by which latter names I shall distinguish them. The first, equal in size and quality to the large Salmon of Europe, enter the Fraser in May; the latter, a very much smaller and not so rich a fish, arriving a month or so later. In the lower part of the river the natives secure them in large quantities by means of drift-nets. Higher up scoop-nets are chiefly used, which are wrought from stages suspended from the rocks bordering on rapid currents; and above Alexandria the Tâcully tribe construct ingenious weirs for their capture. The *Kase*, entering the river as before noted in May, are caught at Alexandria in the beginning of July; though a shoal, resorting to a small tributary called the Nascôh, passes upward at an earlier date. The *Tâ-lo*, arriving at Alexandria later, never reach the neighbourhood of Stuart's or

Fraser's Lake before the first week in August; preceded shortly by the *Kase*.

To those conversant with the habits of the European Salmon it is superfluous to mention that each shoal as it ascends strives perseveringly and with unerring instinct to reach, for its spawning-ground, the spot where itself was generated. The course of the *Kase*, apart from the minor shoals which may diverge to their native tributaries by the way, may thus be indicated from the Forks of *Thle-et-leh* (Fort George), upwards. A division of the grand shoal here takes place; one detachment ascending the eastern, or *Tête Jaune*, Branch, the remainder ascending the western, or *Stuart*, Branch, as high as the point called the Forks of Chinlac, 60 miles above *Thle-et-leh*. A further subdivision here takes place; one portion continuing to ascend the *Stuart* Branch, nearly to *Stuart's Lake*, which, however, they do not enter. The other detachment ascends the *Fraser Lake* Branch, turning off short of that lake, and continuing its course up the large tributary there falling in, called the *Nejâ-côh*, on which its spawning grounds are situated.

The *Tâ-lo*, its van-guard reaching *Thle-et-leh* in company with the rear-guard of the *Kase*, do not enter the *Tête Jaune* Branch, but continue undeviatingly up to the Forks of Chinlac before mentioned, where a separation takes place. One detachment, continuing up the *Stuart's Branch*, passes through *Stuart's Lake* on its way towards *Lake Tat-lâ*: the other following up the other branch does not, like the *Kase*, enter the *Nejâ-côh*, but passing on to *Fraser Lake*, continues through it, and pursues its route by the tributary stream towards the *Lac des François*, on the inner verge of the Coast Range, and opposite to the Southern heads of the *Skeenâ*.

This process, actuated by an infallible instinct, goes on undeviatingly from year to year: and though at times there may occur, from inscrutable causes, a partial failure of the supply, the periods vary but little, and the regularity of the system is never interrupted.

In the Appendix will be inserted a brief notice of several other varieties of the Salmon resorting to Fraser River, some of which, diverging up the Thompson's Branch and other tributaries, do not ascend to the Upper Fraser: and I will now advert to a peculiarity in their fate, which, strange as it may appear, distinguishes the majority from all other known varieties of the genus. There seems to be no question that the shoals resorting to the smaller streams debouching upon the Coast return, after performing their procreative functions, to the sea, as elsewhere. Indeed I am disposed to think that those varieties which resort to the smaller tributaries of the Lower Fraser and the Columbia, probably fulfil their course in like manner. But as regards the main body, resorting to the distant head-waters of those great rivers, it may be uncontestedly asserted *that they never return to the sea.* At first incredulous of this asserted fact, subversive of all my preconceptions on the subject, it was only after the observation of years, under circumstances which seem to preclude the possibility of error, that I was constrained to arrive at the same conclusion. Without prolonging my notes by entering on the particulars of these observations, I may confidently repeat the assertion that, the function of spawning over, the fish, still struggling upwards, die of exhaustion. Upon the main, or Eastern, branch of the Fraser, which as I have said is frequented only by the large variety or Kase, the strongest of those fish attain as high as Tête Jaune's Cache, between 700 and 800 miles from the sea: there their further progress is arrested by a steep fall. At the foot of this fall, and elsewhere below, the stream swarms, in September, with dead and dying fish. The once brilliant Salmon, no longer recognisable save from its general form, may here be seen, the function of spawning completed, almost torpid from exhaustion; its nose in many instances worn to the bone, its tail and fins in tatters, nay its very flesh in a state of half-animated decay, either helplessly floating in the eddies, or with momentary exertion still struggling to ascend.

In no case is the smallest disposition to descend perceptible: its course is still onwards, until, dying at last, it floats with myriads of others to be cast upon the beach, attracting to a hideous banquet a multitude of Bears and other carnivorous beasts from the adjacent mountains. In like manner perish the other shoals upon the head-waters of the several streams to which they resort.*

I am not, however, to write a treatise on Natural History, but to confine myself to such notes as may tend practically to a useful end. Nevertheless I may be pardoned if I have dwelt passingly upon a fact which, if for its singularity alone, is worthy of record. Before quitting this branch of the subject, too, I may supply some memoranda which will convey an idea of the productiveness, in favorable years, of the salmon-fisheries on the Fraser. At the Post of Fraser's Lake, in 1836, 36,000 dried salmon were purchased and stored for use; and at other Posts proportionate quantities were likewise secured out of the superabundant provision made by the natives. The year in question, it is true, was one of great abundance. At Fort Langley (some fifteen miles above New Westminster) large quantities were formerly salted every year by the Hudson's Bay Company, as well for home consumption as for exportation. In some seasons between two and three thousand barrels were thus provided; the fish procured by barter from the natives. For some years past private fisheries have been established, where large quantities are annually cured: and recently an establishment for preserving the fish in cans for exportation has been started, which promises to be very successful. The chief markets are South America, the Sandwich Islands, and Australia.

We may here mention cursorily that, while the salmon, of some particular variety, is common, perhaps, to every stream issuing along the Coast from the Coast-range of mountains,

* On the Columbia the Salmon attain to the head of the McGilivray Fork, more than a thousand miles from the sea. There is there a small lake, which, before the winter sets in, is crowded, I have been assured, with the dead and dying fish.

as well as to the many tributaries of the Fraser, it is not found upon the waters of British Columbia tributary to the Peace River, or indeed to any of the streams flowing eastward from the Rocky-Mountain boundary of the Province. Thus Peace River, and its co-tributary to the great McKenzie, the Athabasca, as well as the Saskatchewan, are destitute of this valuable fish. With our knowledge of the habits of the genus it would be a facile undertaking to introduce the fish artificially into these rivers, by spawn taken from the western watershed: but it is questionable whether the extreme length of the two first-named streams, at least, in their course to the ocean, might not prove an insurmountable obstacle to their successful propagation. Nevertheless, it is possible that the attempt may at some future day be made.

A very valuable fish entering Fraser River to spawn in early Spring, is the *Thaleichthys* (or preferably *Osmerus*) *Richardsonii*—locally known as the Oolâ-han.* It appears in immense shoals, and is caught either with the scoop-net, or, like the Herring on the sea-board, with the rake. This simple device is merely a long light pole, flattened in one direction so as to pass readily through the water, and with the edge set towards the lower extremity with a row of sharply-pointed teeth. The fisherman, entering the shoal, passes the implement repeatedly through the water, with a rapid stroke, each time transfixing several fish. Thus a copious supply is soon secured. The Oolâhan is, in the estimation of most people, one of the most delicious products of the sea. Smaller than the Herring, it is of a far more delicate flavor; and so rich that, when dried, it is inflammable.† This fish

* I was long under the impression that this fish was a variety of Pilchard (*Clupanodon Thrissa*) peculiar to the Pacific; and am indebted to Dr. Robert Brown, of Edinburgh, formerly in command of the Vancouver Island Exploring Expedition, for the correction adopted above.

† So much so, indeed, that, in Alaska, where it is likewise found, it is I believe called the “Candle-fish.” It is mentioned by Franchère, in his account of the Columbia River, under the name of *Outhelekane*, from which its present designation is modified; and,

is not confined to Fraser River, but frequents likewise the Nass, a large stream issuing on the frontier between British Columbia and Alaska; another stream debouching into Gardner's Canal; and probably other rivers along the Coast. Those caught at the mouth of the Nass are of a quality even richer than those of Fraser River. The natives, who assemble there in great numbers in Spring to prosecute the fishery, besides drying them in large quantities, extract from the surplus a fine oil, which is highly prized by them as a luxury, and forms a staple article of barter with the interior tribes. This oil, of a whitish colour, and approaching to the consistence of thin lard, is regarded by those of the Faculty who are acquainted with its properties, as equally efficacious with the Cod-liver Oil so commonly prescribed: and it is said to have the great advantage of being far more palatable. With the exception of a few scores of casks salted annually for local sale, and a quantity prepared like the Red-herring, this fish has not yet, I believe, been systematically cured, or become an article of exportation. There can be no question, however, that, when more widely known and properly prepared, it will be the object of much extraneous demand.

As already remarked, all the larger streams along the Coast abound with Salmon. The Skeenâ, before mentioned, discharging at Port Essington, and the Bilwhoolâ, flowing into the North Bentinck Arm of Milbank Sound, may be specially noted; though equalled, doubtless, by many others. The minor streams swarm during the season with a small variety, known locally to the northward as the *Squâg-gan*; inferior in richness to the larger fish, and therefore not so

from the circumstance of its being strung on cords by the natives to dry, was called by the voyageurs *Poisson à la Brasse*, or Fathom-fish. They were formerly very abundant in Spring on the Lower Columbia; but suddenly, about the year 1835, they ceased to appear, and thence-forward up at least to 1858, none frequented the river. I have been informed, however, that they have since reappeared, and that there is now a regular supply as formerly.

well adapted for salting, but nevertheless of excellent quality. I may here mention as a peculiar trait that the Salmon of this Coast—at least those ascending the larger rivers such as the Columbia, the Fraser, and others—unlike their European congeners, do not rise to the artificial fly. In the inlets around Vancouver Island and elsewhere, while they remain in the sea, and at all seasons of the year, they are readily caught by trolling. The natives employ generally a herring as the bait: but the spoon-bait is found by amateurs to be equally efficacious. It will be inferred that the fish occupy continuously the narrow waters, adjacent probably to the entrance of the streams of their nativity, until they finally re-enter the rivers to spawn: and, admitting the apparently unquestionable fact that some varieties, at least, never return to the sea, it follows as a consequence that the whole term of their existence, from the time when the fry descend the rivers until their final return to spawn, whatever the interval may be before they attain maturity, is passed in these retreats. The quality of the winter fish, caught in these localities in their full perfection, is incomparably fine. The size varies, apparently, in different positions. In the Saanich Arm, for instance, a little to the north of Victoria, the weight may vary from fifteen to thirty pounds or more: but it was mentioned about a month ago (in March) in the *British Colonist* newspaper, that a fish caught with the bait in the outer harbour of Victoria had been brought to market, the weight of which was fifty-five pounds. Fish of this size are, however, comparatively rare. Repeated examination leads me to the conclusion that the Herring is here the favourite food of the Salmon. It is the most successful natural bait; and I have almost invariably found one, and frequently several, of these fish, in the stomachs of ordinary-sized Salmon; but smelts, and occasionally prawns, are also found. It may be added that, while the Salmon refuses the fly or any other bait after entering the fresh water, the closest examination of the intestines of the ascending fish

does not, as far as my experience goes, reveal upon what nutriment they then subsist. A mucous substance alone is discernible; and it must be inferred that minute *infusoria*, the nature of which the microscope might probably detect, is at this period their sole source of nourishment.

But we have dwelt sufficiently on this theme, and must proceed to notice the other products in which these waters are notably prolific. And first of the Herring. This valuable fish resorts in prodigious numbers, at the spawning season in early Spring, to the bays and inlets of the Gulf of Georgia, and elsewhere generally along the Coast. The method by which the natives capture them at this season, mentioned before while treating of the Oolâ-han, suggests an idea of their scarcely conceivable numbers. In appearance they do not perceptibly differ from the European variety, though rather smaller. At the period in question the quality of these fish is inferior; but when caught during their prime, with the net, on the banks which they permanently frequent, they are, to my conception, fully equal to their congeners of the Atlantic sea-board. This remark applies at least to some of the localities bordering on the Gulf of Georgia; and I fancy is generally true. The spawn, attached to sea-weed, or to branches purposely sunk in the shallows for its reception, is gathered in large quantities by the natives, and dried for food.

The Cod caught in the narrow waters are inferior to the Atlantic fish. There are, however, certain outlying banks upon which they are found abundantly, of a quality, it is said, approaching, if not fully equal to, the last.

The Halibut attains upon this Coast a very high degree of perfection. On the outer shore of Queen Charlotte's Island, especially, it is found of a very large size; frequently exceeding 100 pounds in weight, and not unseldom, I am assured, of twice that size. Caught with the hook, these fish are dried in large quantities by the natives, especially of the more northerly parts of the Coast.

To these may be added the Smelt, the Rock-cod, the Flounder, Whiting, and a host of others, with which, in season, the markets of Victoria are constantly supplied—chiefly through the industry of Italian fishermen, who appear here to enjoy a prescriptive monopoly of the trade. Oysters are very abundant. Those dredged near Victoria are of small size, but well-flavoured: northward, in the vicinity of Comox, a larger sample is procured. Of Cockles, Mussels, and other shell-fish there is a copious supply. Crabs and Prawns are not wanting; but there are no Lobsters, save a small kind found in flesh-water streamlets. Oil-producing fish, such as the Ground-shark and the Dog-fish, are common to the whole Coast: the latter so abundant as to give lucrative employment to many fishermen and afford a boundless resource prospectively to others. Of the Phocidæ the Hair-seal is the most numerous; while the Fur-seal, the Sea-lion, &c., are found, chiefly on the outer shores.

The Whale-fishery has of late attracted much attention, and has been prosecuted with a certain degree of success; though, from want of experience probably, less than one might have been justified in expecting. On the outer Coast Whales of the largest description are numerous; which, by the native inhabitants, who combine in parties for the purpose, are harpooned and captured by an ingenious process which it is unnecessary here to describe. In the inland waters of the archipelago a variety known as the Hump-backed Whale is very numerous. These yield from 30 to 50 barrels, or more, of oil; and so far have been killed by the whaling-parties with the harpoon-gun and shell. Many wounded victims, however, through some mismanagement of detail, or perhaps unavoidably under the system, have thus escaped. The system, however, from its assumed wastefulness, is, I am informed, declared illegal by the general laws of the Dominion: in which case it will of course be interdicted, and give place to other schemes, less liable to objection. On the whole the pursuit of the Whale in these waters,

vigorously prosecuted, with a competent knowledge of the business, will doubtless prove ere long a lucrative and extensive branch of the Provincial industries.

CHAPTER VI.

NATURAL PRODUCTIONS CONTINUED.—BEASTS OF THE CHASE, BIRDS, &c.

The Beasts of the Chase found in British Columbia are sufficiently varied, and in parts very numerous. Of the fur-bearing kinds the following list comprises the chief exports of the Hudson's Bay Company, and recently of private traders who have engaged in the business:—

Bears, Brown, Black, and Grizzly;

Beaver;

Badgers;

Foxes, Silver, Cross, and Red;

Fishers;

Martens;

Minks;

Lynxes, Grey and Spotted;

Musquash;

Otters, Sea and Land;

Panthers;

Raccoons;

Wolves, Black and Grey of the large kind;

Wolves of the smaller kind, known as the *Cajoté*;

Wolverines.

The Black-tailed Deer is very numerous along the Coast, and on the islands from the Gulf of Georgia northwards, where they attain to great perfection in due season. They

are also common in the hilly parts of the Interior, as high, nearly, as Thle-et-leh (Fort George); above which point they are rarely, if ever, seen. Besides the gun, various devices are employed by the natives to capture them; along the Coast frequently by pit-falls, in the interior by the snare.

The large North-western Stag (*C. Elaphus*) is very numerous in the hilly parts of Vancouver Island, and upon the Coast of the Mainland as high as about Latitude 52°. This animal differs considerably, both in size and appearance, from the Red-deer of the Eastern slopes of the Rocky Mountains; and though this difference may arise partly from the nature of its habitat, it is probable that they are specifically distinct. They attain to an enormous size, approaching to that of a well-grown ox; and being unwary animals are easily stalked. This animal is locally called the “Elk;” of course erroneously, it being a true stag in all its characteristics.

The Rein-deer (*C. Tarandus*), the Caribou* of the Canadian voyageurs, inhabits all the mountainous regions dependent on the Rocky Mountains and the Coast Range, north of a certain point. In the interior this limit is about Latitude 49°; in the Coast vicinage about 51°; south of which positions it is not found; or, if so, not far, and rarely. The species found in these localities, distinguished by Richardson as the Rocky-mountain Rein-deer, differs materially from the variety common to Hudson’s Bay, known as the Rein-deer of the Barren Lands, than which it is very much larger. The general characteristics of this animal are so well known that description would be superfluous. Its susceptibility to the attacks of the fly, especially of the large Gad-fly called after it *Œstrus Tarandi*, and the partiality it exhibits to the odour of smoke, arising from its habit of resorting to the

* It is from this animal that the famous *Caribou mines* receive their designation, from being situated in their ancient resorts, called by the Tâ-cully, *Hô-tsee-kayá*, or Rein-deer region; and translated to the miners in broken French as the Caribou-land. I have seen this word written, with an affectation of the French orthography, *Caribœuf*; but it is probably not of French origin, but derived from some one of the native dialects of Canada.

vicinity of casual fires in the woods as a protection against the attacks of its tormentors, are taken advantage of by the Tâ-cully of the Upper Fraser, who, even in the winter season, employ lighted brands of rotten wood to cover their approach to the herds while feeding.* During the Summer season, besides other devices, the natives commonly employ the snare for its capture.

Of the three varieties of the Bear found in British Columbia, the Grizzly is the largest, and, as its distinctive designation (*U. Ferox*) implies, by far the most formidable to the hunter. It does not climb, like the others. The Black and Brown varieties, only, are I believe found in Vancouver Island. These are timid ; and, with the exception of the occasional seizure of a stray pig of the settler, comparatively harmless. Dogs and the gun are an efficacious mode of hunting these animals : but the natives employ various devices to obtain them—the Coast Indians frequently the dead-fall trap, the Interior races the snare.

The Panther or Couguar (*F. Concolor* of Lin.) of this Coast is an animal, formidable for its strength and rapacity, but cowardly, save when wounded or at bay. Deer are its chief prey : but it occasionally commits a depredation on the settler's stock. To encourage its destruction, a premium of ten dollars a head is offered by the Provincial Government. In the more settled districts these animals are becoming constantly more rare. They are found on Vancouver Island and along the Coast for some distance northward of 49° , but I have never known them to be met with in the interior of the Mainland, within the limits of the Province.

The Lynx (*Loup-cervier*, or *Pichou* of the voyageurs) is found of two varieties : one, the Spotted, being common to

* In the great mountain-plateau lying at the heads of the Chilcotin River, and extending along the Coast Range, where the Reindeer are especially numerous, the hunters construct huts during the fly-season, disguised outside with dead branches so as to resemble the head of a fallen tree. In these huts constant smoke is maintained ; lured by which the deer approach, and are shot from the ambush.

the southern parts; the second, the Grey, confined, apparently, to the northern interior. The latter, by far the finer variety, appears periodically in vast numbers, simultaneously in British Columbia and in the regions east of the Rocky Mountains. These animals are caught usually with the snare; and when numerous afford a very lucrative employment to the hunter. They prey chiefly upon a variety of Hare (*L. Variabilis*, so called from its changing its color in winter from grey to white) which also periodically abounds throughout the interior. Increasing with marvellous rapidity, these last animals become for the time a very valuable source of subsistence; and when the supply of Salmon partially fails in the upper parts of the Fraser, as it sometimes unaccountably does, the abundance of Hares supplies the deficiency. When, however, the two fail simultaneously, the privation is, by the natives, severely felt. Reading not long since an extract from some work professing to give an account of British Columbia, I noticed that a mysterious connexion is gravely asserted between the occasional scarcity of the Salmon, and the periodical abundance of the Hare, as if they were in some way mutually dependent: but it seems needless to say that this extraordinary assertion is entirely fabulous. As regards the sudden disappearance of the Hare, after increasing to inconceivable numbers, I may add that it is caused by an eruptive epidemic, by which all are carried off save a scanty remnant through which the race is continued and its numbers propagated anew. The Lynx disappears from a similar cause, generally the succeeding year; and the Marten, occupying the woodland tracts of the interior, is in like manner subject to periodical fluctuation of numbers, through a similar process.

It would prolong unnecessarily this general account, were the writer to dwell on the several devices employed to secure the different fur-bearing animals that have been enumerated. Before leaving the subject, however, we may notice divers other objects of the chase which, some of them of marked

utility to the native inhabitants, present at least attractions for the sportsman, if not important to the ordinary settler. Among these the Mountain Goat is conspicuous, frequenting the precipitous eminences of the various mountain spurs, and especially numerous on the offsets of the Coast-range. Along the Coast the natives hunt it persistently, as well for its flesh, which, of the female at least, is sufficiently palatable, as for the hair and wool, of which they manufacture blankets with much taste and ingenuity. Beneath the long hair of this animal, which is of a dull white, there is a thick coating of wool, in fineness at least, if not in length, perhaps not inferior to that of the Cashmere Goat.

The Mountain Sheep, or Big-horn, frequents the less precipitous portions of the Rocky Mountains, where they subside into grassy slopes. It is found on various ridges radiating from the main range towards the centre of the Province. This animal, prized for the extreme delicacy of its flesh and the high condition to which it attains, is stalked as the herds descend to the lower grounds to feed—the aid of a telescope being of advantage to detect their whereabouts. As in most positions they can be approached very closely, loose shot is preferred by many hunters to the bullet, in the chase of these animals: and this because, when not killed outright, the progress of the wounded animal is thereby sooner arrested. The wire-cartridge, however, is the most efficacious missile.

The Moose-deer, numerous in the vicinity of the Rocky Mountains, is not found on the Coast, and does not penetrate far into the central parts of British Columbia. A stray Moose is occasionally found as low down on the Fraser as Fort George; but very rarely.

Along the verge of the Rocky Mountains the Wood-buffalo was once numerous, and is still found at the heads of the Mackenzie Fork of Fraser River and elsewhere, probably in little diminished numbers. From the heads of the Tête Jaune Branch they had disappeared a good many years ago, and numerous relics attested the destruction to which the race had

been subjected. That portion of the Country, however, has not of late years been so much frequented by the trappers as formerly, and it is possible that fresh herds may have appeared there. The Wood-buffalo does not apparently differ, specifically, from the Bison of the Plains; but is said to attain generally a larger size, probably because less migratory in its habits, and enjoying scenes of pasture less frequently disturbed.

The Birds of British Columbia are numerous in kind, and among them are many useful varieties which yield abundant attraction, not only to the professed sportsman, bent only on amusement, but as a relaxation, at times, to the laborious colonist, who finds in them a resource both of luxury and economical utility. Among these the Ruffed Grouse (*T. Umbellus*) is commonly found throughout the Province, frequenting chiefly the neighbourhood of water-courses and the adjacent forests. The Blue, or Dusky, Grouse (*T. Obscurus*), a larger variety frequenting the hilly tracts where Fir-trees abound, in Vancouver Island and in the interior as high as the vicinity of Alexandria. The Spotted Grouse (*T. Canadensis*). This variety is very common in the wooded tracts of the Mainland interior, up to the summits of the Rocky Mountain passes, and frequents preferably the dry tracts occupied by the Banks' Pine where the Uva Ursi and the dwarf Whortle-berry flourish. A bird of excessive simplicity; the male being probably the most beautiful of the genus. The Sharp-tailed Grouse, or "Pheasant" (*T. Phasianellus*)—the Prairie Chicken of the United States frontier. Unlike the other varieties, which are found chiefly in isolated coveys, these Grouse congregate in large packs, and are common to all the open valleys of the Central District, up to a point a little beyond Alexandria. They are in parts extremely abundant, and, frequenting the open country, afford first-class shooting to the sportsman.

The Cock of the Plains (*T. Urophasianus* of Wilson and Bonaparte). This noble bird, approaching a small Turkey in size, and known to the Americans as the "Sage-hen," is never

found except in the hot, sandy, barrens, among the *Artemisia* and the *Cactus*. I am therefore scarcely justified in classing it among the birds of British Columbia, saving that a stray covey may occasionally penetrate within the frontier, at the point on the Okinâgan where, as before mentioned, the extreme North-west angle of the Great Desert partially intrudes. Lower down the Okinâgan they become extremely common; and after the subsidence of the summer freshets congregate in numerous packs along the borders of the Columbia. This bird feeds chiefly on the tender shoots of the *Artemisia*, the succulent leaves of the *Cactus*, and other products of the desert regions it inhabits; and it has this marked peculiarity, that the gizzard is much less compressed and muscular than usual with gallinaceous birds, is very large, and in appearance perfectly resembles a paunch or maw. This peculiarity has not escaped the notice of Wilson and his fellow ornithologists. It has, however, in all other respects the characteristics of the true Grouse, and, like the rest of the genus, the legs and tarsé are thickly feathered.

The Ptarmigan is found in all the mountainous tracts bordering on the Coast Range and the Rocky Mountains: probably, too, in the mountain-ridges of Vancouver Island. On the Mainland I have killed it in winter on the elevated divide between the waters of Thompson's River and the Fraser, in the neighbourhood of the point known as Bridge Creek. In the summer, before inoultting, the snow-white plumage of this beautiful bird becomes of a piebald hue.

The Crested Quail, though not indigenous, is becoming very numerous in the settled districts of Vancouver Island. This bird, introduced originally from California, has thriven well, and promises soon to yield attractive game to the sportsman.

Of Birds of Passage there is a great variety, including the Canada Goose, and several other varieties; the Mallard, the Teal, the Widgeon, and other Ducks; the Swan; and a host of others. Of these birds, in the Spring on their way upward, and in the Autumn on their return from their breeding places,

there are immense numbers in every favorable locality. They become very fat, and are a valuable resource during their season. The delta of the Fraser is a noted wintering-ground for these various fowl, where, over an area of great extent, they are found in vast flocks. The Passenger Pigeon resorts to the Interior localities; on the Coast a different species, resembling the Stock-dove, is found. It is, however, needless to extend the list, which might be done almost indefinitely. Of singing birds there are comparatively few varieties; and none equalling the songsters of the Old World. The Meadow Lark may be instanced as perhaps the finest: but though its notes are rich, they are not sustained. Beauty of plumage however, is a frequent characteristic; and prominent among these is the Humming-bird, a variety of which is found throughout the Province, as high even as Stuart's Lake. There are several harmless varieties of Snake, but only one that is venomous—the Rattlesnake. This reptile, however, is confined to the dry region between Thompson's River and the Southern Boundary. Bad as its reputation is, the Rattlesnake is after all an inoffensive creature, more sinned against than sinning. That its bite is very venomous, however, there can be no doubt: but in all the writer's experience, which is not a short one, he has never witnessed a case of biting by this snake, even in parts south of the line, where they are very numerous.

CHAPTER VII.

CLIMATE, AGRICULTURE, &C.

Before entering on the subject of the Climate of British Columbia it is necessary to remind the reader of the following important fact: namely, that the *winter temperature* of posi-

tions on the northern Pacific Coast, as compared with others on the Atlantic sea-board, is equivalent to at least ten degrees of Latitude in favor of the former. Thus the isothermal line of the mean annual temperature of 50° Fahrenheit, which leaves the Atlantic in about Latitude 41°, and, curving into Ruperts-land as high as the 50th parallel, is assumed to cross the Rocky Mountains in about Latitude 49°, strikes the Pacific near Milbank Sound, in about Latitude 52°. This is of course an approximation, only, as regards intermediate points; but the extremes are marked too strongly to escape even the most casual notice. We are not, however, to enter into a disquisition as to the possible causes of this disparity: it is enough to know that it exists; and that, for instance, while the winter temperature of Quebec is proverbially severe, the corresponding season at the mouth of the Columbia, in the same degree of Latitude, is as mild as that of the South of England.

Upon the southern portion of Vancouver Island the climate, as a whole, may perhaps be compared with the last: saving that there is a greater degree of summer heat, with less humidity. The maximum temperature in the shade near Victoria, in parts of July and August, ranges from 80° to 90° of Fahrenheit; and has on several occasions been remarked by the writer as high even as 96°, carefully noted on an excellent thermometer, by Dollond, placed in the shade, out of the influence of reflected heat.* The mercury in winter sometimes descends as low as 10°—i. e. twenty-two degrees below the freezing-point of Fahrenheit—in seasons of extreme severity; but this very rarely, and for a very brief period. Hence, though some winters may afford good skating around Victoria, and this occasionally for several weeks together, more generally

* For instance, at 3 p.m. at a position in Saanich, in 1870—

| | |
|---------------|------------------------------------|
| June 6th, 79° | July 6th, 94° |
| 7th, 87° | 7th, 92° |
| 8th, 86° | 8th, 83° |
| July 3rd, 90° | 9th, 86° |
| 4th, 93° | Aug. 2nd to 8th, 84° to 96° on 8th |
| 5th, 94° | 9th, 93° |

the ice will last only for a few days, or not become sufficiently strong to bear.

At New Westminster on the Mainland, as elsewhere on the Lower Fraser, there is a greater degree of humidity throughout the year, and the temperature, if more equably warm in summer, does not probably attain to the same extreme of heat. In winter, on the other hand, the lowest extreme, as might be inferred from its inland position, is comparatively more severe.

In the Upper Country the climate is dry, and continuously hot in summer; especially from the vicinity of Thompson's River towards the southern frontier, east of the Cascade Range. The same characteristics, however, apply in a somewhat less degree to the portion lying northward, towards Alexandria. Approaching the Okinâgan, on the southern frontier, the summer temperature is almost tropical in its character. The winter cold, on the other hand, is comparatively sharp; but there is nothing approaching the continuous severity experienced on the eastern slopes of the Rocky Mountains. Little snow falls on the general surface; and in many parts it is almost entirely absent for any lengthened period.

In the Upper District, beyond Alexandria, notwithstanding the elevation above the sea, the climate is warm in summer: in the higher localities, subject to occasional night-frosts. But as a general rule these do not affect the lower levels, where modifying influences exist. In winter, a moderate degree of cold prevails; alternated occasionally with severe intervals produced by winds from the northward and eastward mountains. Thus the thermometer will, during such intervals, sink to 15° or 20° below zero of Fahrenheit, and sometimes even to the freezing point of mercury. But such degree of cold is exceptional, and rarely lasts more than three or four days at a time, when a genial change ensues.

This, briefly, comprises the main features of the climate of the Province in its several divisions. For such as may desire to consult more accurate data, some meteorological tables

will be inserted in the Appendix: meanwhile, in connexion with the general subject, I subjoin brief extracts from the published reports of Officers of the Royal Engineers.

Speaking of Fort Alexandria, Lieut. H. S. Palmer says: "At 11 A.M. on the 16th August (1862) the temperature of "the air in the shade being $70^{\circ} 5$ Fahrenheit, that of the "Fraser was 58° Fahrenheit; and at 10 A.M. on the 29th "of September, the temperatures of air and water were re- "spectively 58° and 46° Fahrenheit."

With reference to points in the vicinity of Alexandria he says: "The altitude of this district is frequently quoted as "rendering it unsuitable to agriculture, but the highly satis- "factory results obtained at Williams Lake and Beaver Lake, "two of the most advanced farms in the Colony, where, at "an elevation of 2,100 and 2,200 feet, varieties of grain and "vegetables are yearly raised in great perfection and abun- "dance, indicate the fertility of the soil, and the absence of "influences materially discouraging to agriculture. There "are, in the section of country under discussion, large tracts "of unoccupied land, where the soil rivals that of the farms "above-mentioned, and where much of the ground is literally "fit for the plough."*

Of the portion lying between Alexandria and Thompson's River, Captain Parsons writes: "Bridge-Creek flows into a "large stream which is said to be a tributary of Horse-fly "Creek. Troughton's boiling-point thermometer shewed a "temperature at the level of the house of $206^{\circ} 0$ on the "29th August, and of $206^{\circ} 40$ on 31st August, indicating "altitudes of about 3,119 and 3,054 feet respectively, or a "mean of 3,086 feet above the level of the sea; nevertheless "the temperature of the air in the shade at 8 A.M. of the "29th was 57° , and of the water of the Creek 54° . On the "31st, at 7 P.M. the air was $60^{\circ} 75$, and on the 1st Septem-

* Reports of Lieut. H. Spencer Palmer, R. E., to Colonel R. C. Moody, R. E., Chief Commissioner of Lands and Works in British Columbia, 24th November, 1862, and 21st February, 1863.

"ber, at 7 A.M., it was 48° of Fahrenheit. ***** Lake La Hache is about 2,488 feet above the sea. The temperature "of the air at 5 A.M. on the 30th August was 42° 5, and at "7.30 A.M. 54°, at which time the temperature of the water "in the lake was 64°. On the same day the thermometer " (not blackened) shewed 80° at noon in the sun.***** "From the foregoing description you will see the great alti- "tude of even the valleys between Lake La Hache and the "Pavillon, while the casual thermometer-readings mentioned "will serve to indicate the temperatures during the month "of August and the first half of September. The whole "period was excessively hot in the day time, with a pleasant "mildness at night. There was no frost except at the head "of the Great Chasm on the occasion mentioned, but it "seems reasonable to suppose that about a month later night- "frosts would be found to prevail.***** Heavy dews were "prevalent, but it seems probable, both from report and the "appearance of the water-courses, that very little rain falls "in this part of the country. During six weeks, from the "commencement of August, there were only two days on "which rain fell, and then it was accompanied by heavy "thunder and lightning."*

Enough, however, has probably been said on this subject; and a brief review of the agricultural products of the various sections will serve equally to illustrate the capacity both of the climate and the soil to second the industry of the agriculturist.

In the settled portions of Vancouver Island all the common cereals are produced abundantly. Wheat yields ordinarily from 30 to 40 bushels per acre; Oats † produce frequently as high as 60 bushels. Indian Corn, though not largely cultivated, and perhaps not an economical crop for this locality, ripens freely by the end of September. Pota-

* Report of Captain R. M. Parsons, R. E., to Colonel Moody, dated 16th September, 1862.

† See Appendix Q.

toes, turnips, and all the usual varieties of culinary vegetables, grow to a great size. The climate seems to be specially well adapted for the growth of Hops. These are cultivated sufficiently to meet the local demand; the surplus, if any, being exported to San Francisco, where their superior quality secures for them a ready sale.* The average yield is from 1,200 lbs. in ordinary years, to 2,000 lbs. per acre in favorable seasons. On the peninsula near Victoria, and I presume in other choice localities, the Musk-melon and the Water-melon attain perfect maturity in the open air, without artificial aid; the Tomato and the Capsicum yield copiously; the Peach ripens its fruit as a standard; and the Grape (of the Isabella variety) produces abundantly and comes to full maturity in a favorable exposure. Orchard fruits, exclusive of the Peach which is not generally planted, are cultivated abundantly throughout the settlements, and with marked success.

On the Lower Fraser the climate is adapted generally for the same productions, and most of those enumerated are cultivated there.

About Thompson's River the continuous summer heat is specially favorable for the production of such fruits as the Melon. Indian Corn would probably be profitable as a general crop. Wheat and other cereals, with all kinds of culinary vegetables, flourish. In parts, where the nature of the locality demands it, irrigation is resorted to with, as may be supposed, the most successful results. Approaching the Southern frontier, upon the Okinâgan, the Grape, were it desirable, might be largely cultivated, and, I do not hesitate to say, with success. I have already noticed the proximity of this portion of the Province to the Great Desert, the intense heats from which extend an influence far around.

At Alexandria, long before the general settlement of the Province, Wheat was cultivated on a limited scale.† From

* See Appendix RR.

† Wheat was also raised for some years in considerable quanti-

1843 to 1848, between 400 and 500 bushels were raised annually at the Hudson's Bay Company's Post, and converted into flour by means of a mill, with stones eighteen inches in diameter, wrought by horses. As much as forty bushels to the acre, by careful measurement, and of the finest quality, were raised on portions of the land cultivated during the interval mentioned. Of late years large quantities are annually raised in the same neighbourhood, as well as elsewhere in the Central District; and it is needless to add with the advantage of very different appliances for its subsequent manufacture.

As before casually remarked, the country from Alexandria upwards is to be regarded rather in the light of a hunting and mining region than as adapted for agricultural settlement. Nevertheless, as high as Fraser's Lake, Barley yields abundantly; and the Potatoe, with of course other culinary vegetables, comes to great perfection.* There are large tracts of the most nutritious pasture throughout.

Before quitting this important subject, however, I judge it well to pursue it a little further than I had at first intended. And first, preferring to quote, where possible, an independent authority, I avail myself of the following excellent remarks which I find published in the *British Colonist* newspaper, from the journal of Mr. James Richardson, conducting the Geological Survey of the Province for the Dominion Government:—

“The vegetable soil which has been mentioned seems “to be of a very productive character, and whether in the “forest, the field, or the garden, appears, combined with the “favorable climate, to yield large returns. In the Comox “district, about 140 miles from Victoria, as already stated,

ties at Fort George; but owing to the occasional occurrence of night-frosts, with varying success.

* In 1839 the return, at Fraser's Lake, from 15 bushels of cut seed, exceeded 700 bushels of Potatoes, of the Ladies' Finger variety. Manure, it should be added, was employed, and the season was very favourable.

"the soil is spread over a very considerable area of prairie country, commonly designated an opening, extending from the Coast up the different branches of the Courtenay River for seven or eight miles. The surface of this district, which is naturally free from timber, with the exception of single trees and stumps, chiefly of Oaks (*Quercus Garryana*) and strips of Alders (*Alnus Oregonia*) in the bottoms, may be some twelve square miles, the scenery of which is picturesque and parklike. Its margin is very irregular in shape, and it is surrounded by a growth of very heavy timber, among which are the Douglas Pine (*Abies Douglasii*) often attaining ten feet in diameter and 200 feet in height, half of which is free from branches, and the Cedar (*Thuja Gigantea*), often equally large. The open country in its natural state is mostly covered with a growth of ferns, which sometimes attain a height of ten feet, with stems three-quarters of an inch in diameter, and roots descending to a depth of three feet. These roots the native Indians prepare in some peculiar way for winter food, and excavate deep trenches to obtain them. The farmers are under the necessity of grubbing up the fern roots before the ground is ready for use, and they are often voluntarily assisted by their pigs in this operation; these animals, it is said, relishing the fern root as food. I was informed by Mr. John Robb and Mr. John McFarlan, two partnership settlers of the district, that the average yield of land, after it is cleared and thoroughly under cultivation, is, of Wheat, from 30 to 35 bushels per acre; Barley, 40 to 45 bushels; Oats, 50 to 60; Pease, 40 to 45; Potatoes, 150 to 200; Turnips, 20 to 25 tons. Some of the Turnips exhibited by Mr. Robb at the agricultural show are said to have been remarkably heavy; but those of the Swedish and yellow varieties, seen by me, I consider rather small. The season, however, was said to be an unusually dry one. The yield of Timothy hay is said to be about two tons per acre. Clover thrives well, and rye grass is valued for its after crop.

"The yield of butter per cow, after calf feeding, is about "150 lbs. annually, the ordinary selling price being 40 cents "per pound. Cattle generally require to be home-fed from "the beginning of December to the middle of April. Snow "seldom lies long. Heavy falls sometimes occur; but gen- "erally disappear in a few days. Once or twice snow has "remained on the ground for two months. Apples, pears, "plums, cherries, white and red raspberries, red, white, and "black currants, and most kinds of fruit, thrive remarkably "well. Some apples, of which I obtained samples, measured "thirteen inches in circumference and weighed nine- "teen ounces. They were high-flavoured and well-adapted "for eating and cooking. Of the pears many measured "eleven inches in circumference, and were high-flavoured "and juicy.

"At Gabriola, prairie land, or openings, such as those "already described at Comox, occur. More of them are met "with on Saltspring Island, but in neither place of the same "extent as at Comox. Mr. Griffith, one of the settlers at "Saltspring, informed me that the fall wheat thrives well "there, and yields from 35 to 40 bushels per acre. Of other "grains the yield seems to be about the same as at Comox. "In Mr. Griffith's garden there was a large plot of common "winter cabbage, the solid heads of most of which measured "from three to four feet in circumference. Red cabbage and "cauliflowers were equally large and sound. Carrots and "parsnips were large, as well as onions; and there was "abundance of tomatoes, and several varieties of gooseber- "ries, which did not seem to thrive so well at Comox. "Mr. Griffith informs me that at Saltspring the bushes give "in quantity and quality a crop equal with the best English. "The crops of all the varieties of currants and raspberries in "quantity and quality vied with those of Comox.

"Mr. Griffith's orchard occupies about two acres, and has "been set out only three or four years. I saw different va- "rieties of apple pear, peach, plum, and cherry trees, and

"the proprietor informed me that all kinds bore fruit last year. The apples are excellent in quality, and the pears, though not large, were equal in flavour and juiciness to any I have ever tasted.

"Mr. Griffith has about 300 barn-door fowls, which are fed on the grain of the farm, and enable him to supply a great abundance of eggs to the Victoria and Nanaimo markets, where they sell from 25 to 40 cents per dozen.

"At Fulford Harbour, Mr. Theodore Frago shewed me a pumpkin which measured 32 inches in length, with a diameter of 15 inches at the small end and 22 inches at the other; and he informed me that larger ones had been used before my arrival. The settlements of North and South Saanich, as well as of other districts near and around Victoria, show a good deal of prairie land, "oak openings," as they are called in that part of the country, from the greater abundance of trees of this species than elsewhere. In these oak openings many beautiful farms are met with, the soil and aspect of them resembling those of Comox. In addition to the grain, fruit, and vegetables enumerated elsewhere, the hop vine has been introduced in North Saanich, and in the neighbourhood of Victoria. In the former place, Mr. Isaac Cloake and Mr. Henry Wain, with some others, have each a hop orchard, as it is there termed, of several acres in extent. Mr. Cloake, who spent nine years amongst the hop fields of Kent, England, informs me that his hops are quite equal, if not superior, to the English, which, according to him, was tantamount to saying that they were the best on the face of the earth; and Mr. Wain, who likewise had practical experience, stated that in regard to aroma they were equal to the best he knew. They are of the variety known as the grape hop. It was introduced from California, and is said to have greatly improved in British Columbia.

"The yield of hops is here from 1,000 lbs. to 1,700 lbs. to the acre, and it brings in the Victoria market from 22

"to 60 cents per pound. When Railway communication is established, the article may become one of trade between the two Provinces, for if I am rightly informed, the hops imported from England are superior to any raised in Canada.

"Other settlements of a similar character to those described are established between Saanich and Nanaimo, which I had no opportunity of visiting. Near and around settlements possessing farms such as mentioned, in many places rocky hills rise up to heights of 1,000, 2,000, and even 3,000 feet and more, the surface of which is in some parts craggy, but in others they present patches with a thin soil, covered with a firm short bunch-grass, on which sheep and cattle thrive well: for such of them as I saw were in good condition. The temperature is cooler in such places than in the lower and more level country, and during the heats of summer they afford excellent pasturage, which will much assist the industry of agriculturists. Along the coasts and in the interior of Vancouver Island, as well as on those of the archipelago surrounding it, many localities for farms, similar to those which have been here described, will be discovered, and hereafter become the homes of thousands of a hardy and industrious people."

With reference to the judicious remarks above quoted, I may observe that the winter-feeding of cattle referred to by Mr. Richardson does not imply the necessity of continuous *stall-feeding*, which of course with large herds, such as some possess, would be an impossibility. The under-growth of the adjacent forests affords, even during the severest season, copious and nutritious browsing. A supply of fodder at night, with the shelter of commodious sheds, serves to maintain the majority of the cattle in condition; while the milch-kine and younger stock receive such additional care as they may require. By this winter-tendance a two-fold advantage, beyond the mere welfare of the herds, is obtained: the straw and other offal of the farm are converted into manure for the future

enrichment of the soil, and the cattle, knowing their homes, continue in all respects more tractable. The fern alluded to is characteristic of most of the open parts of Vancouver Island, and a portion of the Lower Fraser. The highest point at which it appears on the Mainland is at Spuzzum, a few miles above Yale. The whole of the Central District is free from it. Though rather troublesome to eradicate entirely, it presents no serious impediment to the cultivation of the soil. By mowing in early summer—affording, if stored, an excellent litter for cattle—its subsequent vigour is immediately checked. A deep ploughing and cross-ploughing with a strong team prepares the soil for a first crop of pease or oats; but it takes some years of cultivation before the last vestiges disappear. Swedish turnips, I may add, are generally cultivated, and in most parts attain to an enormous size; though, as mentioned by Mr. Richardson, at times subject to partial failure, either from the attacks of the fly, or long continued drought.

The comparatively humid climate of the Lower Fraser, adapts the vicinity specially for the successful culture of green crops. With this advantage, operating on a soil of teeming fertility, enormous products are obtained. The dairy-yield, promoted by the copious and succulent natural herbage that abounds, is very great. At the mouth of the Fraser is an extensive delta, of which the soil, many feet in depth of pure alluvium, is productive in an extraordinary degree. For instance, a few years ago, the newspapers took notice of a cauliflower, raised in this locality and brought over by one of the residents of Victoria, the weight of which I am almost afraid to repeat. It was given, if my memory be correct, at twenty-eight pounds; and certainly, whatever its exact weight may have been, excited in Victoria general attention as a vegetable curiosity. Portions, only, on the borders of this exuberant tract have hitherto been pre-empted; and before the whole can be rendered available for occupation a system of dyking must be resorted to, to exclude the overflow of the summer freshets. This process, I am informed, has already been entered upon,

on a small scale, by individual settlers: but a systematic prosecution of the work, whereby a wide expanse may at once be redeemed, is obviously necessary in an economic point of view. In a speech at a public dinner recently given at New Westminster, I notice that the Premier of the Province alluded specially to this important undertaking as having engaged the attention of the ocal Government. But there are obstacles to its immediate prosecution. By reference to the Terms of Confederation in the Appendix it will be perceived that, in connexion with the undetermined line of the projected Railway from Canada, it is provided that, for two years from the date of union (July 1871) "the Government of British "Columbia shall not sell or alienate any further portions of "the Public Lands of British Columbia in any other way than "under right of pre-emption, requiring actual residence of the "pre-emptor on the land claimed by him." Hence, until July 1873, the Government is restrained from active measures in this regard, either as a public work, or by charter to a private company who might be induced to undertake it. I am not prepared to state, even approximately, what amount of valuable land might thus be made available, as no actual surveys have been made; but it may be safely set down at many thousands of acres, bordering on navigation, and with prolific salmon-fisheries immediately adjacent.

With regard to the agriculture of the Central District there is perhaps little to add to what I have already stated. In connexion with the Upper District, however, I may make some remarks, applicable to it in common with other elevated portions of the vast Territory over which the Dominion Federation now extends. I have mentioned, as a drawback, in parts, the occurrence of summer night-frosts, rendering precarious the cultivation of the less hardy cereals, and vegetables of the more tender growth. In qualification of this remark I may now state, that by a choice of position this evil may be greatly obviated. It will be found that in many localities the low bottoms, too frequently selected for their apparently superior

fertility, are subject to these frosts, while the slopes which border them are entirely exempt. For this condition, without wishing to philosophize, a satisfactory reason may, I think, be given. The cold air, occasioned probably through rapid evaporation suddenly checked at night-fall, with its suspended vapour, descends to the lowest level, displacing the warmer and lighter superficial air below, which in turn ascends the acclivity. I do not question that a due regard to this natural law would, in many parts where summer frosts are found to prevail, save the farmer from frequent disappointment. The fertile bottoms, meanwhile, specially favorable for certain classes of vegetation, should be reserved for these: such as the turnip and other crops that are virtually frost-proof.*

The capacities for pasturage of the Central District are very extensive, and of a character unsurpassed, perhaps, in any part of the world. While the valleys, as shown, are fertile for the production of all the cereals and other produce in ordinary cultivation, the hills which bound them, extending on all sides in endless continuity, sparsely dotted with wood in parts, are covered with herbage of the most nutritious description. Along Thompson's River, and throughout the Southern por-

* NOTE P. S.—Visiting the Hudson's Bay Company's post at Edmonton, on the Saskatchewan, at several times between the years 1832 and 1842, I heard constant complaints that the wheat crops cultivated there were subject to blight from the cause referred to in the text. Subsequently, in 1849, when in command at Fort Colvile on the Columbia, Mr. Rowand, the Chief Factor at Edmonton, wrote to me again complaining, and asking for a supply of seed-wheat to replace his own degenerated produce. I accordingly sent a few bushels across the Rocky Mountains by the Autumn Express; and at the same time mentioned the result of my own then recent experience at Alexandria. Whether owing to this suggestion or not, I am not prepared to say, but a change in the system of culture was subsequently adopted; for Dr. Rae, to whom I mentioned the subject in Victoria in 1864, partly doubtful of the adaptability of the Upper Saskatchewan for wheat-raising, assured me that, on his recent passage across the Continent, he had witnessed, both at Edmonton and Lake St. Anne in the immediate vicinity, crops of the finest wheat, while flour of excellent quality was manufactured yearly.

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tions, there is a species of grass, called by the Voyageurs *Foin Rond*, by the English settlers Bunch-grass, which is specially noted for its valuable qualities.* The whole tract is well watered—in the intervals between the hills by frequent streamlets, in the level depressions by small lakes: while the groves and scattered trees afford a grateful shade by day, at night a shelter. Under this conjunction of favorable circumstances it is not surprising that the herds of cattle, roaming at large in the natural pastures, attain a condition approaching to that of stall-fed stock. Winter-feeding is in most parts quite unnecessary; and it is found that the cattle in early spring, if short of their summer condition, are still in order for the butcher. The Similkameen † beef, for example, when occasionally a herd is brought to Victoria, excites the attention of epicures by its excellent quality, and commands always the highest market-price. In such parts, on the other hand, as it may be

* The late Mr. Jeffrey, a botanist who visited the Country under the auspices of the Hudson's Bay Company, employed by the Duke of Buccleuch and other gentlemen to make collections, informed the writer that the grass in question appeared to be the most valuable for pasture of any he had ever met with. He collected a quantity of the seed, with a view to its propagation in Europe; but it is questionable whether it would thrive in any save the warm dry localities which are its natural habitat. It has the peculiarity that it never ceases to grow: thus, however apparently dry the exterior, the heart, shrouded from view, is always green, even in the depth of winter.

Poor Jeffrey, it may be added, after wandering, sometimes in company with the writer, through a considerable portion of British Columbia, and braving all its fabulous dangers, met his fate in New Mexico, in 1852. He was murdered by a Spanish outcast, for his mules and his scanty travelling-appointments.

† *Similk-âmeen*—literally *Salmon-river*—so named by the natives, apparently on the principle of *lucus a non lucendo*; for no salmon now frequent it. I am, however, disposed to think that in bygone times it was otherwise, and that the fall or rapid near the mouth, by which their ascent now appears to be prevented, has been not very remotely occasioned through some convulsion of nature. The erection of fish-stairs at this point might, I think, be easily effected; and, this done, the fish might be readily re-introduced: a boon to the settlers along the banks. This river, joining the Okinâgan near the Boundary Line, and thence flowing to the Columbia, waters a very picturesque valley, affording, in parts, fertile lands for settlement and abundant pasturage.

found expedient to give occasional assistance to the cattle during winter, when snow is on the ground, an advantage is indirectly gained : the herds become more domestic in their habits, and are gathered afterwards, when necessary, with less difficulty. Horses, however, even during the severest winters, require no such aid. Unlike horned cattle, they instinctively scrape through the snow for a subsistence ; and such is the nutritious quality of the herbage that they winter well. In this way the large herd of horses, some two hundred in number, formerly maintained by the Hudson's Bay Company at Alexandria, were constantly kept in that vicinity : and the band at Kamloops, on Thompson's River, including brood-mares and young stock, probably from five to six hundred, in like manner shifted for themselves at all seasons.

There are probably now, grazing at large throughout the Central District, under the circumstances I have mentioned, a good many thousands of head of cattle, chiefly of superior breeds. Of these a large proportion belong to permanent settlers ; the rest to graziers resorting thither from Washington Territory and Oregon, as to a lucrative market, and for facile feeding. The capacities of the Country are, however, so extensive, that the herds at present scattered through it have no appreciable effect upon its resources, beyond the comparatively limited area of their feeding-grounds. It might be supposed that, free to wander as they are, the cattle might gradually become wild and unmanageable, as formerly in California, or as still in the Southern Pampas. I have heard, however, no complaint on this score. By a simple expedient indeed—resorted to formerly at the interior posts, as well as by the Indians for their horses, and practised, I do not doubt, by the modern settlers—the herds can be readily attracted homeward during the summer season. While the hills are free from flies at night, during the heat of the day the animals eagerly seek refuge from their attacks. The smoke from a smouldering fire, maintained near the homestead, readily attracts them ; and, once accustomed, they afterwards habitually resort to it. This,

however trivial the relation may appear, is by no means an unimportant consideration, for the ulterior effect produced : and thus even the gad-fly, pest though it be, is not without its uses.* On the whole it may be safely affirmed that there exist throughout the region great facilities for rearing cattle on an extended scale, so far only very partially availed of.

Sheep thrive well in the Interior, but, so far, no large flocks exist. The paucity of their numbers, indeed, has prevented the establishment of a woollen-factory which was projected about three years ago. The abandonment of this project is to be regretted, as its prosecution would at once have given an impetus to a branch of pastoral industry which, failing a convenient market for its product, has so far been only partially attended to—and then rather for the butcher than the weaver. There are, however, extensive tracts which I can recall to mind which seem specially adapted for the pasturing of very extensive flocks. For their successful nurture, moreover, the dry nature of the uplands, the quality of the pasture, and the

* The powerful effect exercised upon the migrations of the Reindeer by a species of this fly (*Estrus Tarandi*), and the system consequent thereon adopted by the nations of Northern Europe in the management of their domesticated herds, will not escape the notice of the observant reader. The device mentioned in the text may be regarded as at least a partial adaptation of a similar natural cause. The mosquitoes, on the other hand, execrate them as we may while suffering from their punctures, are presumably not without their direct utility in the order of Nature. I have never been able to discover what the creatures feed upon when a living subject fails them—for they are always apparently fasting. It may be assumed, at any rate, that these tiny tormentors consume, or absorb in some mysterious way, subtile gases, the result of humidity and decaying vegetation, which might else be noxious to Man. I have alluded to the prevalence of these insects at certain seasons upon the Lower Fraser ; and may add that, though not generally prevalent, they are also found in a minor degree along the wooded water-courses of the Interior. Where they exist they are certainly troublesome at times ; but it may be fairly questioned how far the Country in its unimproved state would be habitable without them—if this be any comfort to the afflicted ; for it is noticeable that when the conditions that produce these insects are modified or removed, they vanish with them. The further consideration of this abstruse enquiry, however, I leave to those curious in the arcana of entomology—and I crave pardon for the digression.

character of the climate, would, as it seems to me, be conducive in a peculiar degree.*

As regards salubrity of climate there is probably no part of the world that enjoys greater advantages. We are aware of no endemic disease that manifests itself in any part ; and even upon the Lower Fraser, which from its comparative humidity might be supposed favorable to the generation of fevers of the ague type, we know of no single case that has originated there. On the contrary, where the seeds of these troublesome complaints have been imported from abroad, their effects have been re-produced, if at all, with less virulence, and the sufferers, we have been informed, have gradually recovered. Of course, as in all other countries, occasional epidemics run their course : but as far as the intrinsic healthiness of the climate, throughout, is concerned, nothing is left to be desired. The warm dry climate of the inland summer, it may be observed, is specially favorable in cases of pulmonary disease : and in a more marked degree as we approach the Southern frontier. Lower down on the Columbia River, beyond the limits of the Province, where the climate is analogous in character, we have known cases of the recovery of consumptive patients, of the most signal nature.†

* NOTE P. S.—An article by a writer in the *British Colonist* Newspaper has recently appeared, so closely corroborative of some of the foregoing remarks that I gladly reproduce it in the Appendix.

For the encouragement of Agriculture and stock-raising, I may here add, several societies have at different times been organised. Of these there are now five : one in Victoria, another at New Westminster, a third at Saanich, another at Cowitchan, and the last, and most recently commenced, at Clinton in the Central District of the Mainland.

† I cite two instances, well known to the older residents of the Country. The first, a daughter of the late Joseph Felix Larocque, Esquire, of Montreal, formerly of the North-West and Hudson's Bay Company, the wife of Mr. William Pion. The second, a then young man, a native of Assineboia, who formerly acted occasionally as the writer's body-servant, while travelling on the Lower Columbia. Both of them, reduced apparently to the last degree at Fort Vancouver, were sent to the Upper Country, and recovered

To sum the qualifications of British Columbia as a field for settlement, I may succinctly state, that, though it may never become a large exporter of cereal products, like the Western States of America or California, it possesses within itself all the requisites for success: and the power to support, in connexion with its varied industries and its external relations, a population, at least of several millions, in ease, happiness, and comparative affluence. I would fain avoid the imputation of seeking, possibly, to draw a picture too highly coloured; but I am free, nevertheless, to state my own personal convictions in all sincerity. I conceive of no country presenting greater solid attractions. The varied climate and capabilities of the several sections, whereby diversity of taste is accommodated; the general salubrity and proved fertility of the whole; the magnificent commercial prospects that loom in the not distant future; and, not least, the genuine home-feeling which impresses every English settler whose lot has hitherto been cast within the Province—all combine to recommend it as a future home for those who, weary of the Old World, are bent on seeking a wider scene for the expansion of their energies, amid “fresh fields and pastures new.”

with almost miraculous celerity. The lady first named, after the lapse of many years, is still, or was recently, living at Colvile, near the Boundary Line; the second, hale and strong, was afterwards attached to one of the Hudson's Bay Company's parties in the Interior, and his name is now widely known in connexion with a pass in the Rocky Mountains on the line of the projected Northern Pacific Railway—*Cadotte's Pass*, to wit.

CHAPTER VIII.

TERMS OF LAND GRANTS—ROADS, &c.—PROBABLE LINE THROUGH THE PROVINCE OF THE CANADIAN PACIFIC RAILWAY—ESTIMATE OF DISTANCES COMPARED WITH OTHER ROUTES—NOTES ON TRAFFIC LIKELY TO ENSUE—ADVANTAGES OF ESQUIMALT AS THE GREAT WESTERN SEA-PORT OF THE DOMINION—GENERAL REMARKS.

From the account given in the preceding Chapter it will be inferred that both the soil and climate of a very large portion of British Columbia are highly favorable to encourage settlement. We may now add that vast tracts of land, and especially of the Central District, lie waiting for the plough. It is of course impossible upon a mere cursory review of the subject such as this professes to be, to state, even approximately, what number of cultivable acres there may possibly be: but we may safely assert that, in addition to the many farms already scattered along the main lines of communication, there is immediate room for many thousands more in various directions, all more or less easily accessible.*

The terms upon which the settlement of unoccupied and unsurveyed lands is permitted, are very liberal. Every male person of eighteen years of age or over, being a British sub-

* It would be utterly fallacious to attempt to give an estimate of the number of available acres scattered over the broad surface of the mainland of British Columbia. The Country, as before remarked, is capable of supporting its several millions at least. On Vancouver Island, an estimate made by the Surveyor-General gives more than 300,000 acres of good land, known to be available for agriculture; but this estimate refers only to the Districts bordering on the sea, on the southern and eastern shore. Elsewhere, and in the interior are doubtless valuable and extensive tracts yet to be developed. Its exhaustless coal-fields are, however, the great feature of Vancouver Island—pointing to it as the future manufacturing emporium of the Pacific. Its agricultural claims, though very substantial, must be regarded as secondary to those of the mainland.

ject, born or naturalized, may enjoy the right to pre-empt, under certain stated conditions, a tract not exceeding three hundred and twenty acres in extent, to the northward and eastward of the Cascade Range of Mountains; and one hundred and sixty acres in extent in other parts of the Province. Personal occupation during a period of four years, (intervals of absence when necessary being permitted), and improvements to the value of two dollars and fifty cents per acre, are necessary to complete the pre-emptive right. On proof of this, the title is finally issued by the Government, on the payment of such sum, not exceeding one dollar per acre, as may be determined upon by the Governor for the time being. This payment, if required, may be extended, in equal instalments, over a period of four years after the pre-emptive right is established, and the necessary surveys made. Power, at the same time, is reserved to the Governor in Council to make such free, or partially free, grants of the unoccupied and unappropriated Crown Lands of the Province, for the encouragement of immigration, or other purposes of public advantage, as may seem advisable.

For pastoral purposes very great facilities exist, beyond the limits actually pre-empted. In every part of the Central District extensive ranges of hilly or partially wooded land, rich in the finest pasture, are accessible. These may be regarded as common-land: but each *bond fide* pre-emptor is permitted to lease, in the vicinity of his farm, a tract of unoccupied land for pastoral purposes, to which, during his lease, he possesses the exclusive right. Eligible portions of such leased lands, however, are open to pre-emption, meanwhile, by intending settlers: the lessee, of course, being entitled to claim a corresponding deduction from the trifling amount of rent he may be required to pay.

The upset price of Surveyed Lands, for agricultural purposes, is fixed at one dollar per acre; subject to public sale in lots, at certain intervals, to the highest bidder. All lands remaining unsold after such public exposition, can be

purchased by private contract from the Government at the upset price.

A market is constantly available: on the sea-board through the local demand incident on the various industries of the towns, with the fleet and the mercantile shipping: in the interior through the mines. The products of the farm command, consequently, always a remunerative price.

Owing to the high rate of wages current for European labour, Indian laborers are largely employed. These can be obtained at a comparatively cheap rate; and for most purposes connected with agriculture and fishing they are very efficient. Being cheerful, obedient, and generally industrious, the services of the young men are of much local value.

I have before noticed the principal routes of communication with the Interior, and it seems needless to dwell with minuteness on this point. A brief summary may, however, be given. There is a regular steamer-service twice a week, or oftener when necessary, between Victoria and New Westminster; the running time being about six hours. Thence large stern-wheel steamers navigate the Fraser as high as Yale; the ascent occupying a day or more, according to the condition of the water. From Yale there is a weekly mail-service by stages, up to Barkerville, in the heart of the Caribou mining region. Transport along this line of road is performed with waggons drawn by mules or oxen; relieved, when required, by a steamer which runs from Soda Creek, twenty miles below Alexandria, to Quesnel, forty miles above that point; or some twenty miles higher when necessary. The navigation is then interrupted by a rapid, the ascent of which is not attempted. Above this point there is a clear navigation for steamers for a distance of sixty miles, to within twenty miles of Fort George, where another rapid, impracticable for steamers, occurs. From this point upwards, both by the Stuart and Fraser Lake Branch, and in the direction of Tête Jaune's Cache, there are stretches very favorable for steam-navigation: but the occasional breaks are a

great drawback. Nevertheless, with the extension of the mining operations these will doubtless in time be made available, in parts, so as to meet the increased demand for transport; and inducements for settlement thus arise in the upper portion of the Province which do not at present exist.

The route of access to the mining-region on the heads of the Peace River, known generally as the *Omineca Mines*, to which I have before casually alluded, has the great advantage of shortness of land-travel, and consequently of economy, to persons desiring to proceed thither from Victoria. By this route the first stage is, by steamer to Port Essington, about three days voyage. Thence the Skeenâ River is ascended by boat or canoe, as far as the Babine Forks*; after which the remainder of the distance to the mining locality (estimated at from 180 to 200 miles) is performed partly on foot, partly by water on the intervening lakes. As I have perhaps before remarked, both lines of approach to these mines have their advocates; and each has in some respect an advantage. For the introduction of live stock it is needless to say that the route from the Interior is the only one at present used.

To the excellent natural roads that traverse the country in most parts, I have already alluded. I may add that liberal appropriations for the improvement of these roads in all directions are annually made.† Thus constantly increasing facilities of access to the main lines of transit are afforded. The completion of these last, as has been remarked, involved a very large outlay, and bore hardly on the early resources of the Province. Hence it became necessary to impose cer-

* *Babine* (Fr.) A large lip, as of a beast, &c. The name was applied by the early voyageurs to the Tâ-cully of the Nâtâ-punkat (Babine Lake) on account of their having adopted the custom of the tribes of the Coast immediately adjacent, of inserting a wooden appendage into the lower lip of the females.

† NOTE P.S.—Since the above was written an excellent stage-road has been opened from near the mouth of the Thompson to Osooyos on the Okanagan—a distance of some 200 miles, as travelled. A weekly line of stages is now running on this route.

tain Road Tolls from which a considerable revenue was annually collected. The improved financial condition of the Province, however, since the Confederation with the Dominion, has enabled the Government, during the recent session of the Legislature, to repeal this tax: and all the communications are now entirely free.

By the terms agreed upon on the admission of British Columbia into the Canadian Confederation, the Government of the Dominion undertakes, among other things, to construct a Railway from Canada to the Pacific, through British Columbia, within a period of ten years.* In July of 1871, almost simultaneously with the proclamation of our new political relations, the surveys were vigorously commenced on the Pacific water-shed, in connexion with those already in progress on the Eastern slopes. It would be vain to augur, by anticipation, how soon the great work in question may be accomplished; or to speculate on the unforeseen facilities for its completion which will probably be found to exist. It may, however, be permitted to indicate generally the line, up to a certain point, which the road will probably follow, from the Saskatchewan westward. Leaving that river near Fort Edmonton, a line of country bordering on the divide between the Saskatchewan and the Athabasca, presenting no engineering difficulties of moment, is available up to the Rocky Mountains. Entering the Pass at Jasper's House, the line then diverges up Miette's River, across the height of land, and down the Fraser to the vicinity of Moose Lake or Tête Jaune's Cache, before noticed. Thence by the heads of the Cranberry Fork, and down the North Branch of the Thompson.

It is of course impossible to predict the conclusion at which the engineers may arrive after a full survey of the several passes shall have been effected: but some of the advantages possessed by the route in question may be briefly stated.

* See Appendix L.—Terms of Union.

The Pass by the heads of the Miette * and the Fraser is so gradual of ascent, with so few obstacles worthy of consideration, that it may be characterized almost as a natural road. Its shortness and directness with regard to the probable terminus on the Pacific Coast, give it moreover an advantage over any other line of approach : and although the depth of snow at the summit, during winter, is much greater than I have seen gravely stated, there is far less than by any other Pass with which I am acquainted, either from personal observation or report. The snow, too, through the effects of certain natural phenomena which here prevail, and for which I do not profess to account, becomes more compacted, consequently does not drift in an equal degree, and is therefore in all respects more manageable than elsewhere. The importance of this consideration is material ; bearing in mind that the stoppages upon the Union Pacific Railway during the past winter arose chiefly from drift.

It is a curious fact that, in the valley of the Athabasca, upon this line of transit, for a distance of thirty miles or more both above and below Jasper's House, the snow never accumulates. There is constant grass : and the large herds of horses formerly kept there by the Hudson's Bay Company, for transport over the mountains, wintered there, fat, upon the natural pasture. Crossing by this Pass many years ago, on his way from the Saskatchewan, the writer found, in the month of January during a winter of almost unexampled severity, that the snow had entirely disappeared from the immediate banks of the river, at the mouth of the Cranberry

* Some of these names are destined to be perpetuated, and in any future account of the Province it might be well to notice them. Miette, for example, known in his time as the "Bon-homme Miette," whose name this river bears, was an old voyageur of the North-west Company, who first ascended the stream on a trapping-tour. There is a conspicuous rock near Jasper's House—forming, as it were, with the opposite hills, the portal of the pass—which likewise bears his name. Jasper Klyne was a post-master of the Hudson's Bay Company, long in charge of the little outpost (now abandoned) called after him. A Swiss, I believe, of DeMeuron's Corps, brought out to Red River by Lord Selkirk, in 1814 or thereabout.

Fork, near Tête Jaune's Cache; and, for a distance of some forty miles down the Fraser, the ice was perfectly denuded of snow. A warm wind prevailed, accompanied at intervals by a gentle rain. It could only be inferred that this warm current, extending through the Pass, exercised a modifying influence there; and, spreading afterwards through the Jasper's Valley, produced the effects noted. As these effects, however, are known to be constant in the latter named locality, we may infer that the same cause is likewise constant. I may remark, passingly, that similar effects are also produced in a marked degree in other parts of British Columbia: but, as before mentioned, I do not profess to account for these phenomena in all their bearings. Such conclusions could be arrived at only after minute and protracted observation; and are beyond the scope of the passing traveller, bent on penetrating through the wilderness, and eager to get home.*

The point at which the projected Railway will be made to strike the Coast, is still a problem to be solved. Bute Inlet, north of Nanaimo, is the most eligible, provided it shall be found practicable to bridge the Narrows of Johnstone's Strait, and thus continue the line to Esquimalt. Otherwise a point further South, perhaps Burrard's Inlet, will probably be selected; with a steam ferry to Nanaimo, and thence again by rail to Esquimalt,—the great natural terminus which it is indispensable to attain. In any case the line, after descending the North Branch of the Thompson (assuming the route by Jasper's to be the one preferred) will have to diverge to the westward, and approach the Fraser through some of the depressions near Bridge Creek. It is bootless, however, to anticipate that which the surveys now in progress will soon decide.

On the whole it has been made apparent, by the explorations already effected, that the difficulties in the way of accomplishing the grand national object in view, are far less

* See Note—Appendix F-2.

than were expected. Hence, with the vigorous determination to proceed that has been manifested, we may regard the undertaking as in a fair way for speedy accomplishment. Its future effects in a national point of view, and especially the influence it is destined to exercise on the immediate interests of this Province, might well be left to the imagination of the reader; nevertheless, I may hazard a few remarks, which, if superfluous as regards some, may not be without interest for many.

An undertaking of this nature is not, of course, to be regarded from a merely local point of view: its successful completion involves the future commercial interests, not only of England in particular, but of other nations also. I think it is in the work of Lord Milton and Dr. Cheadle that the route is significantly termed the "True North-West Passage;" just as the Suez Canal may be designated that of the South-east; and as such, in its general relations, we will regard it. It is, however, with reference to Great Britain alone that I shall consider the subject, albeit imperfectly. Our active and enterprising competitors for commercial supremacy, the United States, have already, for three years past, had a line in full operation to San Francisco; of which the signal success presents noteworthy encouragement for other enterprises of a similar nature. As far back as 1866, however, as appears by a pamphlet which lies before me,* while yet this success as a pecuniary question was problematic, a second over-land Railway, called the Northern Pacific, was projected; the proposed terminus of which, in Washington Territory—still I believe undecided—was either at Seattle on Admiralty Inlet, or Olympia at the head of Puget Sound, distant respectively about 85 and 150 miles above Esquimalt, the proposed Canadian terminus, on Fuca's Strait. The last-named enterprise, however, though not formally abandoned,

* Northern Pacific Railway. Memorial, Correspondence, and Report of Engineer in Chief. Washington, 1868. Other competitive Railways through California have since been projected, which it is unnecessary to notice here.

has not apparently been, so far, prosecuted with the wonted energy of our neighbours. Last in the field is that of which we now specially treat—the Canadian Pacific Railway.

I subjoin a comparative statement of the distances by these several routes, compiled chiefly from a pamphlet by the late Mr. Alfred Waddington,* and that before alluded to. I have not, I may add, attempted to verify the estimates in either, but accept both as nearly correct:—

New York to San Francisco (Railway in operation).

| | |
|--|--------------------------|
| Distance from New York, by Chicago, to Omaha | |
| on the Missouri..... | 1,531 miles. |
| From Omaha to San Francisco, about..... | 1,830 |
| | — |
| | English miles..... 3,361 |

Northern Pacific Railway (projected).

| | |
|--|--------------------------|
| From New York to Superior City, on Lake Superior, about..... | 1,500 |
| To Judith Mountains, Long. 109° W. | 895 |
| To Columbia River, above Walla Walla | 660 |
| To Seattle or Olympia, on Puget Sound, about 220 | |
| | — 1,775 |
| | — |
| | English miles..... 3,275 |

Canadian Pacific Railway (projected).

| | |
|---|--------------------------|
| From Montreal to Ottawa, viâ the Ottawa River | 115 |
| From Ottawa to Bute Inlet, about | 2,885 |
| | — |
| | 3,000 |
| Head of Bute Inlet to Esquimalt, 85 miles nearer to the Ocean than Seattle, about | 200 |
| | — |
| | English miles..... 3,200 |

With reference to the commerce of the East—if it be not paradoxical to term that the East which we are now approaching from the contrary direction—the following considerations may be noted. Assuming Yokohama, in Japan, for a starting point, the direct distance to Esquimalt may be taken, in round numbers, at about 4,200 geographical miles; equal to about a month's voyage of a sailing vessel.† Canton is pro-

* Overland Route through British North America, by Alfred Waddington. London, 1868.

† The Flying Squadron, reaching Esquimalt in May, 1870, performed the voyage, under sail, in 26 days—but this was regarded

bably about a fortnight farther, in point of time. Measured across the map, San Francisco may be regarded as equidistant. The actual distance necessary to be traversed by a sailing vessel in order to reach that port is, however, considerably greater; as will appear from the following remarks which I find quoted from a recognised authority of the highest standing—Professor Maury, of Washington. “The trade “winds place Vancouver Island on the wayside of the road “from China and Japan to San Francisco so completely, that “a sailing vessel trading under canvas to the latter place, “would take the same route as if she were bound for Vancouver Island. So that all return cargoes would naturally come “there in order to save two or three weeks, besides risk and “expense.” Hence it is manifest that the Canadian Pacific Railway, terminating at Esquimalt—and in a minor degree the projected Northern Pacific Railway, owing to the perversities of the inland navigation necessary to reach its proposed terminus—would possess a great advantage over the line, now in operation, from San Francisco to New York. The last-named port, moreover—about equidistant from Liverpool or London with Montreal—is considerably farther than Halifax, to which point it would be necessary to extend the transport during the period of closed-navigation of the St. Lawrence. This necessity would involve a further land-transport of 482 miles, by the Intercolonial Railway now in operation: but then the shipping point on the Atlantic would be some five hundred miles nearer to England than is New York. Hence it is obvious that the route now under process of survey, if the foregoing estimates be nearly correct, presents the advantage, as from China to England, of some seven hundred miles over the projected Northern Pacific Railway; and, under the consideration advanced by Professor Maury, of more than a thousand over the present route by San Francisco.

as an unusually short voyage. Probably from 30 to 35 days might be considered a fair run. In connexion with this subject see Note—
Appendix D-2.

As a pecuniary investment the Central, or Union, Pacific Railway has been so far very successful, as will appear by the following statement, issued by the Company, which I extract from a late number of the *San Francisco Bulletin*:—

“Official Statement of business for the three fiscal years, ending April 30, 1872.

| | 1869-70 | 1870-71 | 1871-72 |
|---------------------|--------------------|--------------------|----------------------|
| Gross earnings..... | \$8,364,593 | \$7,333,961 | \$7,679,753 |
| Expenses..... | 5,797,099 | 3,898,704 | 4,062,914 |
| Net earnings | <u>\$2,567,494</u> | <u>\$3,435,257</u> | <u>\$3,616,839 "</u> |

The sources of the above income are, the sale of land-grants along the line, and the enormous traffic, local and from abroad, that has been developed. The outlay is incurred by payment of current interest on Bonds, and running expenses.*

When first the project of constructing a line across the Continent to San Francisco was mooted, sceptical vaticinators augured that it would, at best, be available for the transport of the lightest and most costly description of goods, only. To show how groundless these anticipations have proved, I subjoin a memorandum of the receipts on two successive days of the present season, casually quoted in a recent number of the *Weekly Bulletin*, above referred to. “The receipts of freight “by railroad yesterday included 2 cars of Agricultural Im-“plements; 200 cases Alcohol; 18 cases Boots; 1 car, and “54 packages Bacon; 40 packages Eggs; 74 tierces Hams; “906 cases Cheese; 97 boxes Lard; 35 kits Mackarel; 10 “barrels Neats-foot Oil; 35 barrels Lard Oil; 907 bundles “Paper; 44 barrels Pork; 1 car Shovels; 488 cases and 65 “packages Tobacco; 48 barrels Whiskey; and 640 bundles “Wire.” Again: “The receipts of freight by railroad yes-“terday included 1 car Bacon; 155 cases Boots; 10 cases “Cheese; 10 packages Cordage; 24 bundles Iron Tubes;

* Supplementary to the above statement the estimated gross income for May is given at \$812,000. The actual earnings for the previous month were \$724,446.

"34 bundles Iron; 6 packages Leather; 2 Pianos; and 355
"packages Tobacco."

The return-freights from San Francisco are of varied character; including fresh fruits, flour, wines, and other articles, the product of California; and entire cargoes of Teas and other merchandise from China and Japan. British Columbia affords her quota of patronage in both directions; and recently, I am informed, the Hudson's Bay Company forwarded from Victoria to San Francisco a number of casks of valuable Furs, for transmission thence, overland and by steamer, to London; at most a three-weeks passage.

I shall not, I trust, be suspected of arguing from a purely local stand-point, when I indicate briefly some of the advantages which Esquimalt presents as the future terminus of the Dominion Railway. The feasibility of bridging the Narrows opposite to Bute Inlet is, as I have remarked, still undecided: * otherwise the question would be one simply of cost; which, all other considerations admitted, would be of inferior moment. But, whether by bridging here, or with the intervention of a ferry from some other point, it is necessary to the full measure of future success that the line should be continued to the extreme limit I have named. Lying immediately within the broad Estuary of De Fuca's Strait, Esquimalt seems destined by Nature as the future emporium of a vast commerce. Its splendid harbour is at all times readily accessible from seaward; and, with a light-house which stands some ten miles westward, and another which, like the Pharos of another Alexandria, indicates the immediate entrance, it may be securely approached and entered at any hour, by day or night. It is not, however, upon this ground alone that the position is

* In a former chapter I have mentioned that the channel at this point does not exceed a few thousand yards in breadth—the exact measurement I have not at hand. It is here, however, necessary to explain that a large island, called Valdez Island, separates the whole channel into two parts, each of which is narrowed, at points lying diagonally to each other, to very small dimensions. The depth of the water, and the strong effects of the tides, appear to be the chief engineering difficulties to be encountered.

founded. Above Esquimalt the navigation, though still good, is rendered more uncertain through the effect of cross-tides and baffling winds; and especially to reach a comparatively remote point like Bute Inlet. This difficulty, it will be suggested, might be overcome, with a certain outlay, by the employment of tug-boats: but there is another incidental difficulty, prolific of delay, against which it is impossible to provide. This is the occasional interruption of the inland navigation with large craft, at times by dense smoke from forest-fires, at times by fog, and sometimes by the combined effects of both. The autumn, chiefly, is the season when these impediments might be anticipated: and under the circumstances mentioned, serious delays might occasionally occur to the shipping, which, the terminus being at Esquimalt, would be avoided.

As regards the speedy completion of the work that has been undertaken, a few words may be said. I am aware that there are some who, whether really sceptical or not, profess to doubt either the power or the inducement to carry it through. In the uncertainty of these doubters I do not share. With a line devoid for the most part of engineering difficulties, traversing, with few interruptions, a region conspicuous for its fertility and its pastoral advantages, and fringing elsewhere a tract teeming with mineral riches, the local inducements are surely great: and beyond these are the wide commercial interests which I have feebly endeavoured to indicate. Up to a certain period, indeed, many, and myself among the number, questioned the probability of the enterprise being seriously considered for many years: but the declaration of the Terms of Union, and the prompt and energetic action of the Dominion Government since, in fulfilment of their engagements, preclude the question of doubt. To repeat it, then, is to question the good faith of the Administration: a mark of disrespect, or want of confidence which, by its liberal and manly treatment of the Province, it has not certainly deserved. The preliminary surveys completed, and the line decided, active operations will be commenced simultaneously at both ends: and all augury

is fallacious if the grand undertaking be not soon an accomplished fact. To Mr. Alfred Waddington, I may add, from whose pamphlet I have quoted, and whose acquaintance I enjoyed in Victoria, is due, not indeed the conception, but certainly the earnest advocacy of this important national work. Through him the project was first introduced in a tangible form to the British public; to its furtherance the whole energies of his latter years were devoted; and it was while thus engaged that he recently died at Ottawa—I believe of small-pox. The death of this worthy gentleman, while the pet project of his life was still in embryo, created much sympathy in Victoria, as elsewhere: and I do not resist the opportunity which I now have, of paying at least this passing tribute to his memory.

Before leaving this topic I ought not to omit to notice an incidental advantage which the route I have indicated across the Rocky Mountains possesses over all the rest, and of which the importance does not at first appear. It is the freedom from all danger of Indian molestation. In conversation, not long ago, with Sir James Douglas, the former Governor of the Colony, whose great local knowledge and sound judgment in these matters it is needless to dwell upon, I drew his attention to this point, and he agreed with me in ascribing to it very great weight. Crossing the Saskatchewan at Carlton, the line would pass through a country occupied by the Crees—a friendly and inoffensive tribe. Leaving the Cree tract near Edmonton, and proceeding towards Jasper's, a few scattered families of Strong-wood Assineboines alone wander over the country—poor, harmless, and hospitable, whose sole care is to hunt and live. West of the Pass, by the heads of the North Branch of the Thompson, some scattered Shew-shwaps hunt and fish for a livelihood. To reach the Southern Passes, on the other hand, it is necessary to pass through a tract frequented by the roving tribes of the broad Prairie, including those Arabs of the West, the Blackfeet. It does not indeed follow that collision with these must necessa-

rily ensue: but the risk is there; and it might involve, in time, the necessity of maintaining a permanent military force to guard against attack; just as the United States Government is compelled, under similar circumstances, to do, for the safety of travellers by the Southern Railway.

CHAPTER IX.

POLITICAL CONSTITUTION—SCHOOLS—CHURCHES, &c.—
POSTAL SERVICE—TELEGRAPHHS—MECHANICS' INSTITUTES, &c.—NEWSPAPERS—BANKS—POPULATION—
INDIANS—GENERAL REMARKS ON GOLD MINING—MINERAL RICHES—COAL-MINING, &c.—GENERAL REMARKS ON THE ATTRACTIONS OF THE PROVINCE AS A FIELD FOR SETTLEMENT.

The Government of British Columbia, as of the other Provinces provided for under the "British North America Act, 1867," is administered by a Lieutenant-Governor, appointed by the Governor-General of Canada. The gentleman now filling this important position is the Honorable Joseph W. Trutch, formerly Chief Commissioner of Lands and Works in the *ci-devant* Colony.

The responsible advisers of the Lieutenant-Governor are three in number; occupying respectively the offices of Provincial Secretary, Attorney-General, and Chief Commissioner of Lands and Works. Provision is made by the Constitution of the Province that the number may, if found advisable, be increased to five.

The Legislature is composed of a single House, styled the Legislative Assembly, and consisting of twenty-five members returned by twelve Electoral Districts, as under; viz.:—On

Vancouver Island : Victoria City, 4 ; Victoria District, 2 ; Esquimalt, 2 ; Cowitchan, 2 ; Nanaimo, 1 ; Comox, 1. On the Mainland : New Westminster City, 1 ; New Westminster District, 2 ; Yale District, 3 ; Lillooet, 2 ; Caribou District, 3 ; Kootânais District, 2. The expenses of the members during the session of the Legislature are paid by the Province ; and there is an allowance for travelling expenses to and fro.

The franchise, confined to British subjects, born or naturalized, is so liberal as to be almost equivalent to manhood suffrage. The elections are for four years : the voting done by open poll.

Foreign residents may acquire all the rights of British subjects, within the Province, through a very simple and inexpensive process of naturalization.

The Province returns six members to the House of Commons at Ottawa ; and three Senators are appointed by the Governor-General to the Upper House. The expenses of these Representatives are defrayed by the Dominion.

The only direct general tax levied in the Province is for the maintenance of Roads, and is expended within the Districts where levied. This tax is an annual poll-tax of two dollars each on every male resident above eighteen years of age. In addition the owners of land are charged, for the same purpose, four cents per acre on their land, beyond the limit of 10 acres.

A well-devised law for establishing free Schools, unsectarian in character, throughout the Province, is now in force. A Superintendent of Education has been appointed under the Act ; and a Board of Education, consisting of six members, holds its sittings in Victoria. Local details are superintended by Trustees, elected in each School District. As will be seen by reference to the Appendix, liberal allowance has been made in the Estimates (since voted) for carrying out the provisions of this important law. Among other definitions of the duties of the Board of Education under the recent Act, is the following, embodying a provision of great prospective importance : "To establish a High School in any District where

"they may find it expedient so to do, wherein the classics, "mathematics, and higher branches of Education shall be "taught; and such school shall be subject to the same obligations and regulations as other Public Schools generally."

For private education Victoria affords good facilities: for boys, the Collegiate School; for girls, the Angela College. Both these schools are under the visitorship of the Episcopalian Bishop of the Diocese, the Right Reverend Dr. Hills. There are besides other good schools for pupils of both sexes; noteworthy among which is the excellent establishment conducted by the respected Sisterhood of St. Anne.

In Victoria there are two Episcopalian Churches—the Cathedral of Christ Church, and St. John's; and there is a third at Esquimalt. The Wesleyan community have a well-built church, which it has been found necessary recently to enlarge. The Presbyterian congregation likewise have a very neat church. The Roman Catholics have two commodious churches, the Bishopric of that communion, however, consequently on the death of the late highly respected Bishop, the Right Reverend Mgr. Demers, being at present vacant. In addition to these places of Christian worship, there is the Jewish synagogue, a substantial edifice of brick. New Westminster is the residence of an Archdeacon, the Reverend C. T. Woods; and its church has the enviable distinction of possessing the only set of bells in the Province; a fine peal, presented to the congregation by the same amiable Christian lady whose name I have had occasion already several times to mention—the present Baroness Coutts. Elsewhere in the various Districts, where congregations can be assembled, there are established facilities for public worship, and small churches have been built here and there; in other parts, necessarily, it is only by occasional visits, at stated intervals, that the religious wants of the community are met.*

The Judicature of the Province is composed of a Chief Justice, and, at present, one Puisne Judge—a second one, it

* Hospitals, see Appendix W.

is understood, to be shortly appointed. At Victoria and other principal stations there are Stipendiary Magistrates, who act also as Judges of the County Courts: in other parts order is maintained by Honorary Justices of the Peace. The vigilance of the Magistracy, and the salutary rigour of the Judges, have repressed that tendency to violence and crime which is assumed, however erroneously, to be inseparable from young communities such as this. In brief, the laws are here as vigorously administered, and there is as much security for life, limb, and property, as in the oldest Provinces of the Dominion—and this, if my meaning be duly apprehended, is saying not a little on the question of law and order.

The Postal Service of the Province is now entirely in the hands of the General Government of the Dominion; and whatever deficiency may exist in the details of the system as lately re-organized, will shortly be remedied. A special Agent, it is understood, is now on the way from Ottawa to place these matters on an unexceptionable footing. At present there is a direct mail from Europe and Canada, by way of San Francisco, twice a month; reaching the latter place by railway, and brought thence to Victoria by a subsidized steamer. There is also an overland mail twice a week from San Francisco to Olympia, on Puget Sound, by which letters are, under the present arrangements, less regularly brought. From Victoria there is a mail-service twice a week to New Westminster; and once a week to all other parts of the Province, upon the regular lines of communication. The rates of postage will appear in the Appendix.

There is constant telegraphic communication between Europe and Victoria, by way of New York and San Francisco. The line, which crosses the southern part of the Gulf of Georgia to Victoria by a submerged cable, has a branch extending to the verge of the Caribou region.

Victoria supports two daily newspapers, the *British Colonist* and the *Standard*, which also reappear in a weekly form.

New Westminster has likewise two, the *Dominion Pacific Herald* and the *Mainland Guardian*. The Upper Country boasts of one; a useful publication, called the *Caribou Sentinel*.

At Victoria and several other of the towns, Mechanics' Institutes and Reading Rooms have been established. At these, besides the standard collection of books that has been accumulated, the latest European and American periodicals, with the principal newspapers from abroad, can always be perused.

There are three principal Banks in Victoria, with branches elsewhere: the Bank of British North America, the Bank of British Columbia, and Wells, Fargo, & Co.—the last an American firm, too widely known on this Continent to require more than mention. In addition to their banking business the last-named carry on an Express Agency, ramifying throughout Christendom. Through their means the most important business may be transacted: and any article of use or luxury, from a piano probably to a penny whistle, can be readily obtained. This institution, originating in the early necessities of the California Mines, has been of marked utility and success: and there are probably few dwellers upon the Pacific Coast who have not been at some time indebted to the care or the courtesy of the Agents of Wells, Fargo's Express. The several Banks allow interest on time-deposits of three months or upwards. In addition to the private Banks there is a public Savings Bank, of great utility in its way.

The population of British Columbia, owing to the fluctuations of mining success, has varied much. At no time very large, it does not now probably exceed twelve thousand Europeans, of whom one-half reside in Victoria and its immediate environs. The permanent inhabitants of the city, by a census of 1870, amounted to 4,208, in the proportion of 2,528 males to 1,680 females. No reliable census of the whole Province, however, exists, so that any estimate made

can be merely an approximation. With the recently improved prospects of the country, it is needless to say that immigration is again setting in; and it is noticeable that former residents, who had left under discouragements real or fancied, are now eagerly returning.

The Indian population, on the other hand, is numerous; and as the Indians are producers as well as consumers, they form an important element in the consideration of the commercial relations of the Province. For the rest, it may be remarked that they are strictly under the law; and that, with the appliances at command, no difficulty is experienced in exacting obedience. In saying that the native population is numerous I ought to confine the remark to the immediate vicinity of the Coast. In the interior they are comparatively few, and sparsely distributed. In many points, too, the Indians of the interior are far more engaging in character than those of the sea-board. These last, however, are of a more ingenious turn. They excel in many simple manufactures, and are not a little advanced in divers mechanical arts. I was shown, for instance, by a gentleman in Victoria, a fine meerschaum pipe, which, having been accidentally damaged, had been entrusted for repair to an Indian workman. Beating out a gold-coin he had remounted the article with a skill comparable with that of the most practised goldsmith. It has already been mentioned that the services of the young men among the natives are turned to good account in agricultural and other pursuits. I may add that, beyond this, little has been done for their improvement, save through the efforts of private individuals, and the exertions of the Missionaries of various denominations who are in the field. The Government has been unpardonably supine: and it is gratifying to know that, under the new political relations of the Province, the care of this branch of the population devolves upon the Dominion; and that a sound system of Indian policy will soon be organized, from which the most beneficial results may be anticipated.

The mining interests of British Columbia are of too great importance to be treated of summarily in a brief treatise such as this. A reference to the Appendix will show, however, the large recorded export of Gold for many years past: * but so much is conveyed away by private hand that the real product of the mines, of course, cannot be ascertained. The writer has no practical knowledge of the subject of mining, and he is averse to give currency to reports of the richness of this locality or of that; which, however apparently well founded, too often prove fallacious. Large fortunes have been made, and large fortunes will continue still to be occasionally made, in this exciting pursuit, within the precincts of the Province: but while some have thus become rich, others have only been comparatively lucky, while others again have failed almost entirely of success. He cannot, however, do better than quote on this subject the following excellent remarks, which he finds in a Report of Lieut. H. Spencer Palmer, of the Royal Engineers, dated 21st February, 1863; and which, notwithstanding the lapse of time, may be regarded as still generally applicable.

“The general tendency of the auriferous ranges through-
“out the Colony leads to the conjecture that the future ex-
“plorations will discover an almost unbroken continuation of
“rich deposits maintaining a north-north-westerly direction,
“and occupying a large portion of the great elbow of the
“Fraser River.

“Caribou is closely packed with mountains of considerable
“altitude, singularly tumbled and irregular in character, and
“presenting steep and thickly wooded slopes. Here and
“there tremendous masses, whose summits are from 6,000
“to 7,000 feet above the sea, tower above the general level,
“and form centres of radiation for subordinate ranges. This
“mountain system is drained by innumerable streams, of

* Amounting, for the last fourteen years, to between 21 and 22 millions of dollars in the aggregate—showing an average exceeding one and a half million yearly, exclusive of the large amounts that have escaped record. See Appendix F.

"every size from large brooks to tiny rivulets, known respectively in mining phraseology as "creeks" and "gulches," which run in every imaginable direction of the compass, and, winding among the valleys and gorges, discharge themselves into the larger streams or "rivers" which at length conduct their waters to the Fraser.*****

"The most remunerating mining is generally found near the head waters of the creeks, in close proximity to the mountain clusters, which seem to be the great centres of wealth; and thus some of the less attractive diggings on the rivers and on the lower parts of the creeks have as yet scarcely claimed attention.*****

"The gold of Caribou is not easily attainable, and a knowledge of practical mining, shafting, tunnelling, and drifting, is necessary to those who wish to work to advantage. The richest deposits are found in the existing and in the old channels of the creeks down close to the rocks *in situ*, called in mining language "bed-rocks," which in Caribou are talcose slates.*****

"I should be trespassing beyond my province were I to attempt to describe the mechanical methods by which the gold is extracted from the earth, or to furnish statistics of the populations and yields of the various mining creeks. But I beg permission to contribute my testimony to the extraordinary auriferous wealth of Caribou, and, in very few words, to clear up a point upon which an uninitiated person is likely to be misled, viz.: the nominal yield of a "claim."

"A miner's claim occupies a piece of ground 100 feet square. When a creek has 'prospected' well, it is usual for miners to form themselves into companies of from four to eight, or upwards, to take up their claims (for each man 100 feet square) in proximity to one another, and to work the whole ground thus claimed for the benefit of the company. If rich 'pay-dirt' be struck, and the mine be in a sufficiently advanced state, companies, anxious to obtain

"the greatest possible quantity of gold in the shortest possible space of time, will frequently employ additional working-hands, and work during the whole 24 hours. The wages given last season were £2 sterling for the day of twelve hours. By these means extraordinary yields are sometimes obtained, and instances were known last autumn of as much as 250 oz (about £800 sterling), or even more, being 'washed up' by some of the richest companies on Williams Creek, as the result of 24 hours' labour. Thus, although this sum, subject to deductions for hired assistance, was divided among the four, six, or eight lucky proprietors, as the case might be, it must be remembered that it was due to the labours of double the number of men, and that the dividend thus declared should not, in such instances as these, be taken as indicating the direct result of one man's work. Cases occur of rich 'pockets' of gold being struck, and incredible sums being rapidly extracted by simple means and at no extra expense; these are exceptions."*

The chief mining localities outside of Caribou are, at Big-bend, above the Arrow Lakes on the Columbia River; the Kootânais mines, on the tributary of the Columbia of that name; and on the Peace River. There are besides inferior "diggings," occupied chiefly by Chinese and others who, like them, are content with minor profits, where by patient industry a moderate competence is obtained. To such, however, as desire to try for higher prizes a wide field is open; and, without committing myself to any assertion as to the richness of any special locality, I may safely state the conviction, which I share with many others—that the mineral gold-wealth of the Province has yet been but very partially exposed. Meanwhile the introduction of machinery, with the aid of capital and engineering skill, promises to effect soon a very great change: and though the individual

* Report of Lieutenant H. Spencer Palmer, R. E., to Col. Moody, R. E., Chief Commissioner of Lands and Works. 21st Feb., 1863.

miner will still continue, as before, to share the hazards of fortune, the great prizes will, as elsewhere, fall to the overpowering combination.

As regards the other mineral riches of the Province the command of capital, beyond any that is locally available, seems to be indispensable for their development. Rich copper-leads abound along the Coast. A few years ago perhaps a dozen enterprises, for working as many seams, were set on foot: but, as might have been foreseen, they all failed from the cause indicated. Possibly, had all these scattered endeavours been concentrated, a better result might have been obtained. As it was, the scanty resources of each were frittered away—in some cases through sheer ignorance and mismanagement: and the conclusion became apparent, that without the assistance of capital from abroad and the employment of competent conductors, it was vain to persist. So with certain silver-leads—sufficiently rich it is believed, to reward richly the investment of money, but for which confidence has not so far been secured. The Geological Survey of the Province which has been undertaken by the Canadian Government, and is now in progress, will doubtless reveal more conspicuously the existence of these latent treasures; and we may trust therefore that the day is approaching when this great source of wealth will no longer be neglected.

The returns given in the Appendix will show that the Coal-mines of Vancouver Island are more favourably circumstanced. The oldest mine at Nanaimo, commenced by the Hudson's Bay Company, has for the last twelve years been the property of an English Company, bearing the name of the *Vancouver Coal Company*, who share a handsome annual dividend for their investment. There are two other mines in the same vicinity: one of these, the *Harewood*, owned also by English capitalists, is not at present worked; the other, the *Dunsmuir*, is in its infancy, but promises to be very successful. There is also a fine seam of coal, requiring only capital for its working, at Baynes' Sound, near

Comox; besides that at the north end of the Island, and another of Anthracite on Queen Charlotte's, to which I have previously alluded. In the event of a future treaty of Reciprocity with the United States, in which all the Provinces of the Dominion would of course share, the demand for Coal from Vancouver Island will receive a great impetus. So far as can be discovered there is no coal of quality at all comparable with it elsewhere on the Coast: so that were the present restrictions upon its importation removed, it would take a more prominent place in the San Francisco market than it at present occupies.*

In 1869 an Ordinance was issued, the declared object of which is "to develop the resources of the Colony by affording facilities for the effectual working of Silver, Lead, Tin, Copper, Coal, and other Minerals, other than Gold"—the last being specially provided for in a separate Ordinance. Under the provisions of the Act in question, it is in the power of any person, or association of persons, to seek for any of the minerals enumerated, under special licence over a given space; and, if successful in their object, to obtain a Crown grant of the locality, under conditions named. It is under this Act that Mr. Dunsmuir, who I believe was originally an Overseer or Foreman in the employment of the Vancouver Coal Company, and some others, have established their right to what will soon become, if not already, a very valuable property. Confining ourselves to the consideration of Coal, and without going into minute particulars, the chief requisites may be succinctly stated.

1. A "Prospecting Licence" is first obtained, on application in due form to the proper authorities, not exceeding two

* NOTE P. S.—Since the above was written the import duty on foreign coal entering the United States has been reduced from \$1.25 to 75 cents per ton. Anthracite is admitted duty free. The published statements of the exports from Nanaimo, for the half-year ending 30th June last, show a notable increase, which is probably due in some measure to this cause, however short the interval for its operation.

years in duration: subject to extension if asked for, upon satisfactory grounds, at the Governor's discretion. This licence is obtained upon cause shown, and the payment of a trifling fee; and entitles the holder to exclusive mining rights of search, meanwhile, within the limits described, other than for gold.

2. A Prospecting Licence for Coal alone, may include within the general limits therein defined, not exceeding five hundred acres to each individual applicant, or previously unoccupied land; or two thousand five hundred acres to an association or company consisting of not less than ten persons. The licence carries with it the right to make roads, use timber, erect buildings, and other privileges necessary to preliminary explorations.

3. If successful in the quest, the final grant is obtained on the following terms—viz.: For any quantity up to and including one thousand acres, at the price of five dollars per acre: provided always that on proof, to the satisfaction of the Government, that the sum of ten thousand dollars has been beneficially expended on any land held under Prospecting Licence for Coal, a grant of one thousand acres of the land held under such Prospecting Licence shall be issued to the company holding it, without payment of the upset price of such land. In other words they receive, virtually a bonus of five thousand dollars, in consideration of the preliminary expenditure of the larger sum. Under certain necessary modifications, the same general rules apply to mining explorations in quest of the other minerals named. I do not, of course, profess to go into details; but I may venture generally on this assurance—that the most liberal interpretation to the provisions of the Ordinance is always given by the Government, whether as regards individuals, or associations *

* NOTE P.S.—In the Appendix will be found a description of the Coal-works in operation at Nanaimo, which has very recently been given by a visitor. Appendix B-2. The great riches of Vancouver Island in this invaluable fossil, and the excellent quality of the

In conclusion, the general advantages of British Columbia as a field for immigration may be briefly summed.

A temperate climate, remarkably salubrious in its character; a fertile soil easily brought into cultivation; rich and extensive pastures; abundant natural resources for procuring food; land cheaply, if not gratuitously, attainable by the industrious; good government under a liberal constitution; security of life and property under rigidly executed laws; facilities for religious worship for every denomination; a liberal system of education, free of cost; ready and cheap postal communication with all parts of the world; telegraphic facilities through the United States to Canada and Europe; a wide and constantly extending market, soon to be enormously increased by the progress of the Canadian Pacific Railway and other concomitant enterprises.

To this may be added, the early occupation of a Country destined, if all augury be not fallacious, ere long to become, in connexion with the Dominion of Canada, one of the most important and flourishing dependencies of the Imperial Crown. The distance of British Columbia from England, added to the uncertainty or ignorance of its resources, has doubtless so far acted against its being regarded favourably as a field for colonization. A reference to the scale of passages in the Appendix will, however, show that the objection of distance, at least, through increased facilities of locomotion, is gradually vanishing. British Columbia is in reality to-day nearer to London, in point of time, than was Canada thirty years ago. The cost is still an objection; but even this, it is to be expected, will soon be diminished, if not materially, at least to some extent. At present the command of about £40 is necessary for a second class passenger; thus:

| | |
|---|------|
| England to New York or Halifax, £6 to £8..... | \$40 |
| To San Francisco (Currency) by railway | 90 |

coal produced, apart from the commercial advantages directly accruing, point to a great manufacturing future for this part of the Province.

| | |
|---------------------------|-------|
| To Victoria | 15 |
| Incidental Expenses | 50 |
| <hr/> | |
| | \$195 |

It is to be borne in mind, however, that the passage may be thus effected within the month; and that consequently the overland route is on the whole the cheapest.

I am aware of no instance where an able-bodied, industrious, and sober man, reaching the Province, has failed of success. What with the gold-mines, the high rate of wages, and the constant demand for labour in different shapes, the good economist can soon establish his footing, and become a thriving land-owner. If in this position he may not at once attain to opulence, he realizes a competence, and, if he have a family, can bring them up in respectability and comfort.

I may state an instance, though for obvious reasons I suppress the name. A. B. had been a farm-laborer in Scotland. Securing a steerage passage in a sailing vessel, he reached Victoria in 1862. He at once procured work upon the road between Victoria and Esquimalt, then in process of improvement, and found that, living well meanwhile, he could lay by a dollar a day out of his wages. In the spring he went to the Interior of the Mainland, and obtained ready employment; sometimes as an assistant to mining-companies, but never mining on his own account. At the end of four years he was in a position to buy and partially stock a good farm out of the accumulation of his savings. He is now a prosperous farmer, having two hundred acres of good land, all enclosed, and with a large portion under cultivation; about a score of fine cattle, and numerous swine; a good house; substantial farm-buildings; with horses, and all the necessary agricultural implements, including the half-share of a reaping-machine.

This is not a solitary case, but is cited as the example of many.

In the Central District of the Mainland large fortunes have been made, by parties who had capital at the outset, by cattle-

grazing. Two brothers, the Messrs. Harper, citizens of the United States, from Oregon, may be mentioned as having been very successful in this branch of business. Several English gentlemen, it may be added, having a certain command of means, have settled in various parts of the interior, and are realizing a rapid return for their investments.

The fishing interests of the Province have not been so far adequately developed. In this branch of business there is doubtless a wide field for enterprise, which will not long be overlooked.

. As regards society few words must suffice: in parts refined, it is throughout decorous, hospitable, and intelligent.

For the encouragement of immigration an appropriation has this year been made by the Legislature, to the extent of the surplus funds available,—since increased by an appropriation from the Federal Government. So far, no settled scheme in connexion with this appropriation has been published; but it may possibly appear in the Appendix. Hitherto a system of assisted passages for domestic servants has been at times adopted by private parties; and it is probable that something of the same kind may be proposed by the Government with regard to general immigrants. In the former case a bond was executed for the repayment of the sum advanced, in due time after arrival. Female servants, who I may remark are greatly in demand, were generally the subjects of these private arrangements; but the issue was not always satisfactory, at least to one party in the contract: for the damsels were likewise in great demand in another direction; and, whatever their personal charms, were generally snapped up in matrimony long ere their engagements had expired. But we must not quarrel with the issue. If the employers were for a while inconvenienced, a public benefit, and much individual happiness, were promoted; albeit that this expanded view of the question may have borne with it little consolation at the time. Leaving aside, however, all question as to the details of the

*are you
satisfied*

scheme that may be contemplated by the Government to promote the end in view, I may venture at least on this general assurance—that, whatever the measures adopted, both as regards the particular class of immigrants referred to, and others more favorably circumstanced, they will be such as to contribute to the immediate ease, and ultimate prosperity of all. And, on the part of the People generally, I may safely add, that a cordial and a hospitable welcome will be cheerfully extended to such as may decide on making their future home in BRITISH COLUMBIA—the youngest daughter of the Dominion—the fair, and fertile, and happy Province of the WEST.

CHAPTER X.

SUPPLEMENTARY.

INDIANS AND INDIAN MISSIONS—STATE OF SOCIETY—
CAUSES OF PAST RETARDATION OF THE PROVINCE—
GENERAL PROGRESS ON THE PACIFIC COAST, WITH
EXTENT AND COST OF RAILWAYS ALREADY EXISTING—
SPARS OF BRITISH COLUMBIA—USUAL DIMENSIONS OF
THOSE SHIPPED TO VARIOUS MARKETS—SAN JUAN
QUESTION—END.

The foregoing pages, with the exception of some few notes and addenda made during the progress of the printing, were composed and sent in to the Government previous to the 25th of May, the date originally fixed for the completion of the competitive treatises. An extension of the time for another month had been meanwhile accorded, of which, ignorant till too late, the writer could not take advantage. He avails himself, therefore, of the opportunity now afforded, to add a few supplementary remarks, unfettered by the trammels under

which the previous portion was composed, and which seem called for by circumstances which have since come under his notice.

It seems necessary to put the reader on his guard against certain misrepresentations to which British Columbia has been subjected; and it will not, I trust, be regarded as a case of special pleading if I attempt to do so. It is true that some candidly-written works have appeared, to which honorable reference is made in the *résumé* of the published authorities elsewhere given. But other works, again, have been written, of quite a contrary tendency: and, the evil report being too often more readily accepted than the good, the effect of these, if we may judge from the comments they have elicited, seems to be predominant. Whatever the instigation to such production—whether the disappointment of over-sanguine hopes, the exaggerated perception of minor difficulties, or, under a less charitable supposition, the pecuniary inducement “to make a book”—it matters not to enquire: but the effect is there. A “book” is made; not in the cant acceptation of the *habitués* of the turf, but in a sense directly important to the public, because productive of a positive injury to many.

My attention has been directed to two works coming under some one or other of the terms of the above category, which have recently been published. Upon these I have made, in the Appendix, some passing remarks, certainly not inferring a very favorable judgment, either of the degree of knowledge or of good faith by which they are characterized. One of them, flourishing in fair type and with a very sensational imaginary picture, might well be dismissed, upon its own merits, from serious consideration: the other derives factitious importance from its being honored with notice in a publication so widely read and so influential as the *Saturday Review*, through the columns of which paper, alone, I am partially acquainted with its tenor. These two books, with the remarks of the reviewer upon the latter—coldly expressed and dubiously worded

though his approbation be—form the text for certain remarks which I now make, in extension of the cursory notice of the subjects before given.

I have remarked of the Indian population that, in their relation to the colonists, the services of the young men are turned to good account; and that all are strictly under the law. At the outset of the general colonization of the Country, in 1858, it is not improbable that a good many concealed murders of white men took place; for the sudden influx of some twenty or thirty thousand men, ere yet the machinery of government was fairly organised, led naturally to many disorders. With the multitude, among a majority of well-disposed persons, no small leaven of the worst characters from California, as might be supposed, was mingled: and it cannot be doubted that in certain cases the aggressions, or brutal excesses, of such led to retaliation, sometimes upon innocent victims. Previous to this the Hudson's Bay Company,* with whom the administration of the affairs of Vancouver Island at that time rested, under charter from the Imperial Government, had successfully restrained the natives from molesting the few settlers who then occupied a portion of the nascent Colony. The judicious administration of the resident Chief Factor, the present Sir James Douglas, K. C. B.—then Governor of Vancouver Island, and afterwards, when disconnected from the

* The past Hudson's Bay Company—the *élèves* and successors of the hardy North-westers of Montreal and of the original traders of Hudson's Bay, united by the Coalition of 1821—are here alluded to: a co-partnery of interests between the Stock-holders in London and the Officers in the Country, since terminated, and remodelled on a different basis. Lest it should be supposed, or as some at a distance might be tempted to insinuate, that the Company as now organized still retain a dominant sway in the politics of British Columbia, it may be stated that their influence in this regard is here no greater than possibly in London—or in Timbuctoo. The Company of the present day is purely a mercantile association, denuded, here as elsewhere, of all its former power and *prestige*. As merchants, however, under the excellent local management provided, they obtain justly the highest public confidence; and, with their vast command of capital, exercise a legitimate mercantile influence, in all respects beneficial to the Province.

Company, of both sections of the present Province, at first for some years separate—co-operated with the admirable system which prevailed throughout the Country, in the management of the Company's affairs, to maintain an order uninterrupted by any serious outbreak. Kindness and consideration, tempered by judicious firmness, were the chief secrets of this marked success: and when an exigency demanded the occasional exercise of severity, punishment was confined to the guilty alone, and necessary justice in all cases tempered by mercy. No wonder, then, that the sudden inundation of the Country by a flood of adventurers, unhabituated to intercourse with the native races, and whom they regarded as strangers, disorganised previous restraint. But British law soon asserted its sway. The excesses of the evil-disposed among the immigrants were checked with the strong hand. Detected culprits among the natives suffered punishment under due legal process; and thus order was restored. Subsequently it became necessary to employ severe measures upon the West Coast of Vancouver Island. One or two villages were bombarded by vessels of Her Majesty's Squadron, in order to compel the delivery of offenders guilty of crimes against a ship-wrecked crew—and a salutary dread was established in all parts along the Coast, which the periodical visit of a gun-boat serves to maintain and strengthen.

In the interior of the Mainland, where, as I have remarked, the Indians are more sparsely distributed, and are altogether a race morally superior to those of the Coast, order has been successfully maintained by the Civil Power. The natives, long habituated to our customs, through intercourse with the former traders, harmonise well with the present occupants; and the kind treatment generally extended to them by the well-disposed, secures good-will. It is in the "Debatable Land" alone, situated between the frontier of the settled region of the Interior, and the main-land Coast, that any danger of collision, however remote, is to be apprehended. The natives along this line, seated near the rapids which interrupt

the navigation of the minor rivers disemboguing along the Coast—the points most favorable for their salmon-fisheries—are numerous; and, owing to their seclusion, comparatively more rude and uncultivated than the rest. Through this cause, partly, and partly from causes that have never been satisfactorily explained, some eight years ago, a party of men in the employ of the late Mr. Waddington lost their lives near the head of Bute Inlet, upon the line of road now under exploration for the Canadian-Pacific Railway: and recently a minor misunderstanding has taken place at the Forks of the Skeenâ, but unattended with loss of life or personal molestation. The first was settled by the local Government, though at great pecuniary cost, by the punishment of the murderers: the second, originating in the accidental burning of a village, through the negligent act of some travelling-party on their way to the Peace River mines, has been arranged by Governor Trutch, on the part of the Dominion Government, by a trifling money-payment for the loss sustained—an arrangement no less judicious, than equitable under the circumstances. As regards this class of the natives, however, it may be hoped that, under prudent management, and with the knowledge of our real power that exists, all occasion for the exercise of future severity will be averted.

I have said that the former Governments of the ci-devant Colony have been unpardonably supine with regard to the Indians. I mean this relatively, as concerning their positive elevation in the social scale: not as inferring want of sympathy in their actual condition. For the Indians have always shared, equally with the white residents, the protection of the law; and this they have been made to understand, and are fully aware of. But there is a wide field for their material improvement—*material*, indeed, but implying a concomitant amelioration of a deeper and a holier nature; for the two go hand in hand, and cannot be dissevered. I have casually noticed the missionary efforts that are in progress; and I may add that, so far as is apparent, a degree of

unanimity prevails, despite the formal differences of creed, which argues well for the general progress. For, admitted that a common end be in view, it is surely impolitic to disturb the minds of the neophytes, by questions of whether the good teaching be of Paul or of Apollos. Be not alarmed, however, kind reader. We are not about to enter upon a polemical disquisition. The point is noticed because we have witnessed elsewhere the evil consequences of such warfare of sect against sect, to the common detriment of all. But as an adjunct to moral and religious teaching, however zealously applied, the inculcation of solid industry, and the material elevation of the Indian in the social scale, are elements essential to success; and where such success may have been hitherto partially obtained, it will be found that to this combination of effort, mainly, it is attributable. To this end the co-operation and aid of the Government are an important condition: and it is satisfactory to know, that, under the new relations of the Province, this co-operation will ere long be afforded. The success of Mr. Duncan, the Superintendent of the Church Missionary establishment at Methlakâtla before referred to, only partially fostered by the authorities as his exertions may have been, is an example of what may be effected under zealous and judicious management. I am aware that the efforts of this gentleman have been occasionally scoffed at or under-rated; but every enterprise of the same nature has been subjected to similar detraction,—the value of which, therefore, in this case may be readily estimated. My own conclusion, from information directly and indirectly acquired from unquestionable sources, is that much good has been already effected, and a solid groundwork laid for wide prospective improvement. Yet it is to be regretted that in the conduct of this mission, admirable though its success has been, a grave oversight is suffered to continue by its sustainers. Its policy is too much centered in an individual—in many points of view an evil, and obviously in this; that, no successor being in course of pre-

paration, were the present Superintendent to die to-morrow, the whole edifice which he has founded with so much pains, would probably crumble to the ground. Division of labor, so necessary in the mechanical arts,* is no less beneficial in missionary enterprise.

Various missions have at different times been established among the Indians of the North-west; some of which, like that just noticed, have been partially successful, while others, through neglect of proper conditions, have signally failed. East of the Rocky Mountains an Episcopalian Mission has been in operation on the *Missinipi*, or English River, which has, I understand, attained a fair measure of success. This mission, which has existed for the last thirty years, was founded and liberally endowed under the will of the late Mr. James Leith, formerly a Chief Factor of the Hudson's Bay Company, for the special improvement of the natives among whom it has been placed. Upon the Saskatchewan, and at Lake Winnipeg, on my last visit to Hudson's Bay, in 1842, a Wesleyan Mission had been recently established; and there were also Roman Catholic Missions in various parts. On the Columbia River, in the parts which

* The importance of this axiom is notably recognised by the Jesuits, in the admirable discipline of their missions. While regular subordination is maintained, aught approaching to a preponderating individual influence is rigidly discountenanced. All unite, each in his separate path, to promote the common end: and one leader being removed by death or other cause, another is not wanting to supply the deficiency. With some I may possibly incur a degree of odium for thus instancing as an example, the proceedings of a body whom I know it is the fashion to decry. But I do so advisedly—without reference to the remote political aspirations which its members are supposed constantly to keep in view, and of which I do not profess to judge—but solely in accordance with the beneficent results of their exertions, as missionaries, which I myself have witnessed. I may add, that I recall with satisfaction the many pleasant hours which—spite of formal difference of creed—I have enjoyed, in bygone times, in the remote recesses of the interior, along the line of the Rocky Mountains, in the society of my worthy friends of this indefatigable Order: notably, the Fathers Nobili, De Vos, Vercruyse, Accolti, Mingarini, and others; some of whom have since gone to their rest, while others still continue their self-denying labours in various parts.

by the Treaty of 1846, became portions of the United States, several missionary establishments were founded in 1840 by American societies, and afterwards abandoned in despair of success. One of these, however, conducted, on the more solid basis I have indicated, by the Reverend Dr. Whitman, gave earnest of a more favorable issue. But a sad catastrophe rudely dissipated the sanguine hopes that had been formed. The Measles broke out in 1847, and ignorant or neglectful of the simple necessary precautions under the disease, many of the natives were carried off, throughout the country. Whispers of foul play and evil influence were insinuated into the credulous minds of the survivors; and their animosity, once roused, was readily directed against their benefactors. A sudden attack was made, resulting in the massacre of the worthy Dr. Whitman, his wife, and others connected with the Mission.* Since this catastrophe

* The mission station of Dr. Whitman was among the Cayooses, at Wailetpoo near Walla Walla in Washington Territory. There seems to be little doubt that the instigator to this fearful massacre was one Joe Lewis, said to have been a Mormon, who subsequently evaded punishment by absconding to the Mountains. A curious exemplification of the respect in which the people of the Hudson's Bay Company were held by the natives, was afforded on this sad occasion. Two boys, sons of one of the Officers, who were under the care of Dr. Whitman, for tuition, were called forth by name as the massacre began, and from the very presence of the poor lady who a moment after fell a victim. They were taken charge of by the chief, and sent on horseback, under escort, to the adjacent post of the Company at Walla Walla. Subsequently the late Chief Factor Peter Skeen Ogden, who with the present Sir James Douglas at that time superintended the affairs of the Columbia Department, ransomed from the Indians, and thus probably saved the lives, of a number of American immigrants who had been made captives.

It is of interest, however, to notice how all these matters dovetail with each other. The existence of British Columbia as a Colony—an event that sooner or later must of course have occurred—was directly hastened by the event related. Debarred for the time from our usual access to the sea, by the Columbia River, through the war that existed between the American Government and the Indians—known locally as the *Cayoose War*—we were compelled, in 1848, to force our way to the Coast by the line of the Fraser, in order to import the annual supplies for the Interior. Fortunately, as if by prophetic anticipation, routes in this direction had been explored during the summers of 1846 and 1847. By one of these, striking the Fraser at the point above Yale where the Alexandra

all missionary enterprise, upon the line of the Columbia River, has, I believe, been confined to the Roman Catholics. On the Pend' oreille tributary, near the Boundary Line, a Jesuit mission has been in operation for many years, through which much good has been effected—a system of common-labour, under established rules, being partly the foundation of success. As far back as 1842, the late Right Reverend Bishop Demers—then a priest, and afterwards R. C. Bishop of the Diocese—passed a winter under the writer's roof at Alexandria, where a rude church was erected under his supervision by the natives: and at present, at different points there are mission-stations conducted by clergy of the various denominations, whose labours, it may be hoped, are more or less encouraged by success.

I have thought it proper, even at the risk of being tedious, to dwell at some length upon this topic, in order to dispel the impression that appears to have gone abroad, that the Natives of British Columbia are in a condition of unmitigated barbarism—than which no statement can be more fallacious. That the large majority of the Coast Indians are, morally, in a very degraded condition, may not be concealed: but there is nothing in their conduct to justify the fabulous tales of wanton blood-thirst, as against the whites, that have been lately promulgated. Thievish, and 'eplorably licentious in their habits, as they doubtless are, they have been over-awed by the law; and the seeds, at least, of moral improvement—tardy and remote though the growth may be, and impeded by the corruptions promoted by the lower grades of the civilized race—have been cast among them. Nor let this consideration be received with sneering incredulity. Precept and example are never without effect, albeit slow, and at first imperceptible. The Good is perceived: and though, as with

Bridge now spans the river, we succeeded in penetrating to the dépôt at Fort Langley—and thenceforward, at first by this route and subsequently by the way of Hope and the valley of the Similkameen, the transport continued to be performed—the prelude to the great lines of communication which have since been perfected.

the heathen Poet of old, it may not at once be practised, the leaven has been introduced which, with time, must operate.

Upon the superior character of the Interior tribes I have already remarked, and need not expatiate. Yet even to these, in common with the others, the most groundless charges have been applied—even to that of *cannibalism*, if we may judge from the reviewer's comments. The revolting charge may be unhesitatingly contradicted: the “brave and blood-thirsty cannibal,” the bug-bear held out to “unfortunate stray settlers,” does not exist here. The only instance that might in any way countenance the shameful accusation that I ever knew, took place, or was reported to have taken place, many years ago at Fort George, in the remote interior; where an Indian, whose name I have forgotten, was said to have had recourse to the horrible expedient, to save life while starving in the mountains. The Indian thus accused, however, was regarded as a kind of *pariah* by the rest; and by the voyageurs, with a pious horror, was designated the *Mangeur de monde*, and scrupulously shunned. Other cases may possibly have occurred, under similar circumstances; but this is the only one that ever came under my individual notice—and I have witnessed at times, and sometimes haply had it in my power to alleviate, miseries of famine which, if aught might questionably excuse the revolting expedient, might indeed have justified it. But, for the honor of human nature in its primitive state, I am proud to say the vile temptation was resisted, with a persistency of physical endurance which, witness the records of history, is not too strongly characteristic of our own boasted civilization.

Nevertheless, there was formerly a superstitious custom among the natives of the Coast, not yet, possibly, quite extinct in parts, which, under an exaggerated or malevolent view, might be urged to countenance the charge. This custom is analogous in character, if not identical with, a practice of which we read, whether fabulously or not I do not profess to determine, as having existed among certain European na-

tions—the *Lycanthropia* of the Ancients, the *Loup-garou* of France, the Persian *Ghoule*, the Teutonic *Wehr-wolf*—all, probably, the result of a simulated ecstasy of superstitious origin, resolving itself, at times, into a real phrensy. In the case immediately referred to the object was to constitute power as “a Man of Medicine”—equivalent to the African *fetish*, or the like. In the Southern parts of Vancouver Island this assumed wolf-madness took the shape of tearing living dogs to pieces with the teeth; among the Bella-bellas of Milbank Sound of biting pieces of flesh from the arms of the unresisting bystanders during the progress of the rites; and farther North, as I have been assured but never myself witnessed, of tearing to pieces and even partially devouring a sacrificed slave. Revolting as the statement may appear, it will be estimated at its full value, if employed to sustain a charge which, ignorantly or presumptuously advanced, has been only too credulously accepted.

The difference to which I have several times adverted as existing between the natives of the Interior districts and the occupants of the Coast, in customs, character, and language, indicates unmistakably a diversity of origin. The natives of what I have termed the “Debatable Land”—those occupying the line intermediate between the Coast and the Interior—are obviously of mixed extraction through intermarriage, and participate in the characteristics of both races. It is, however, aside from my purpose to enter into particulars regarding this question, which is one rather for the ethnologist than the general enquirer. Nevertheless, as regards the several tribes that fringe the Northern Coast of the Continent, from the borders of California up to Cook’s Inlet, where they interlock with the Western Esquimaux, I may state the conclusion at which we may, I think legitimately arrive: namely, that they originate from the westward—from Japan, the Kuriles, and elsewhere. There are many points of physical resemblance, with probably remote traces of customs, which indicate the origin of some of them,

at least, from Japan. Whether the immigration in the remote past has been voluntary or fortuitous, it is of course vain to conjecture: but the possibility of the latter supposition has been convincingly established, even within the limit of my own experience. For in 1834, in consequence of Indian rumours which had reached the Columbia River during the preceding winter, a vessel was despatched from Fort Vancouver to Queen-hâ-ilth,* south of Cape Flattery, to enquire into the circumstances of a reported wreck. Captain McNeill, the Commander, on arriving there, found the remnants of a Japanese junk, and purchased from the natives a quantity of pottery and other articles that had formed portions of her cargo. He likewise brought away three Japanese, the survivors of a crew originally consisting, as we understood, of forty; the rest having perished at sea, of hunger. It appeared that, having been dismasted in a typhoon and lost their reckoning, the junk had drifted for many months until at length stranded. Since then frequent mention has been made of disabled junks having been encountered at sea in the North Pacific, by whalers, and the survivors of the crews rescued from their perilous condition. All these were more or less advanced in their drift towards the American Continent. On board one of them was found, among other merchandise, about 12,000 pounds of Beeswax. This circumstance affords the clue whereby the nationality of another junk wrecked long ago upon the Coast, near the mouth of the Columbia River, can be inferentially established. A tradition of this existed when the first traders settled there in 1810; and some of the crew were said to have reached the shore alive. This tradition, however, derived direct corroboration from the fact, that quantities of beeswax were constantly found in the sands at Clatsap, on the southern shore of the estuary—the indicated point of shipwreck. As late as 1855, indeed, after violent storms, cakes of the wax, re-

* This, or its immediate vicinity, was the scene of the destruction of the "Tonquin," and massacre of the crew, in 1811. See Franchère's travels, and *Astoria*, by Washington Irving.

taining their original form and quite uncorroded by time, were still occasionally discovered—the sole difference observable between it and the recent substance being, that it was of a finer quality, harder, and partially bleached by exposure.*

Withal, the race has greatly diminished in numbers since their contact with Europeans. One tribe, the Chinooks of the Lower Columbia River,—numerous when first I knew them,—has almost entirely vanished : and along the Northern Coast a constant diminution is perceptible, more especially among those who have immediate intercourse with the Whites. For this, divers obvious causes may be assigned. The occasional devastation by epidemics, such as small-pox, is one: of this last-mentioned disease, however, the spread has been much diminished of late by vaccination. A second fertile cause has been, doubtless, the supply of intoxicating liquors—deleterious if not positively poisonous compounds—by unscrupulous men of the lowest and the laziest class. The laws established for the prevention of this offence, both within the Province and in the adjacent Territory of the United States, are stringent, and every effort is made to enforce them: nevertheless constant evasions occur; and it has been seriously mooted whether, if it be found impracticable to suppress the nefarious traffic entirely, it might not be prudent to legalise it under due restrictions. Upon this vexed question I am not called upon at present to advance an opinion. It will doubtless soon come under the notice of the Federal Government; and be decided either in the way proposed, or by the adoption of suppressive measures more cogent in their character, and more efficiently carried out, than those at present in operation. A third and last cause may be only passingly adverted to: the physical contamination which a degraded and licentious intercourse carries with it, against which no laws can provide. Yet, even among some of the interior races, and while still their communication with the Whites was very limited, a mysterious decay was apparent, referrible to none of the causes mentioned.

* See Appendix H-2.

Pulmonary affections were the form in which the decay of the vital power was manifested in the children : and each successive generation showed a greater ratio of deaths, chiefly of confirmed phthisis. A great change in the ordinary habits of life might be suggested as the most obvious cause of this degeneration. The substitution, among many, of European clothing for the primitive dress of skins, alternated at times with unwonted exposure through uncertainty of supply, might well induce, in part, the effect noted. But, while noting the general effect that has resulted, it is bootless to speculate too narrowly as to the cause.

It may possibly be considered by some, that I have dwelt with too much minuteness upon the subject of which we will now take leave. But its importance in considering the condition of the Province is, I trust, an adequate excuse. The amelioration of the native race, moreover, is a proposition not to be lightly ignored. While asserting for ourselves the privileges of civilization, we assume also its responsibilities : and whether in our relations as a Government, or as individuals, it is necessary that these responsibilities should be kept in view.

The question of the general condition of society within the Province has been very summarily dismissed in the text. I might here repeat emphatically the expressions already used, and thus convey the only contradiction which I might condescend to give to the disparaging insinuations which have been published. But I am not to constitute myself the apologist of the British Columbians against every absurd attack ; and they would, indeed, be little thankful to me for the exercise of a chivalry so superfluous. I will confine myself, therefore, to a brief notice of some of the circumstances that have contributed to the establishment in this young community, of a degree of order and respect for the law, which among eye-witnesses has excited general admiration. In 1858, as I have before casually mentioned, Victoria

was suddenly awakened from a previous trance by the influx of successive crowds of eager immigrants, attracted by the report of the gold-discoveries on the Fraser. A vast and motley assemblage was soon collected in the hitherto tranquil vicinage. How many there really may have been cannot be correctly estimated. I have set the number down vaguely at 20 or 30 thousand—there were probably more: and among them, it is needless to add, there was no small proportion of turbulent characters, each armed with his bowie-knife or his revolver, and generally disposed to set the restraints of the law at defiance. Into this crowd of desperadoes *the constable*—for primitive Victoria boasted, I believe, but of one—proceeded to arrest an offender. No personal injury was done to the minion of the law, but as a matter of course his prisoner was rescued by the surrounders. Governor Douglas, receiving notice of this occurrence late in the evening, at once despatched a message to Captain—the present Admiral—Richards, then at Esquimalt in command of H.M.S. Plumper. In less than an hour after the receipt of the Governor's message, the Plumper steamed into Victoria Harbour. The marines were landed, and, after a very brief interval of search, the rescued prisoner was re-arrested by the Civil arm, and before midnight was safely lodged in the bastion of the old Fort—the prison of the period. The firm, yet quiet, assertion of the law on this occasion had at once a salutary effect. Afterwards, when the machinery for maintaining public order was fully organised, all difficulties gradually disappeared. I might here pay a tribute of acknowledgment, personal to those who have been instrumental in carrying out the laws; but good taste warns me to refrain. Yet I may safely say, that to the unflinching rigour of the judiciary, and the energy of the stipendiary magistracy, the good results are mainly due: and I may add that the good sense and law-abiding sentiment of the majority of the population, have co-operated to the desirable end. No extreme measures, such as the exigencies of society have at times demanded elsewhere, have here been requisite. All has

been conducted with an order and a propriety such as one might expect to witness in an older country; and although a sprinkling of bad characters may still remain, the majority find it expedient to quit a scene where their evil deeds cannot be exercised openly with impunity. The good understanding, too, which has always existed between the local Government and the United States authorities, our neighbours—with the Ex-tradition Treaty and the facilities afforded by the electric telegraph—has aided reciprocally in promoting the maintenance of order in both communities. I am glad to have the opportunity of referring incidentally to the existence of this friendly understanding, which no circumstances have occurred to interrupt; and which, with the constant inter-communication that subsists, is in all respects mutually beneficial.

At the outset of his comments on the statements upon which he professes to found a judgment, the reviewer remarks that no country has so signally disappointed expectation as British Columbia. What the sanguine expectations formed may possibly have been, it is needless to inquire; but as far as the gold-yield alone is concerned, the recorded returns for the last fourteen years elsewhere given—equal to an average of £30 sterling per annum for every individual of the present European population—do not surely justify the assertion. Withal, we may admit, generally, that just expectations have not been adequately fulfilled: and for this reasons may be assigned. In the first place the marvellous policy of the Imperial Rulers in placing the two sections which compose the the present Province under distinct governments, as separate Colonies, was directly impeditive of success. The puerile jealousies hence engendered, moreover, continued to exercise a baneful influence, even after the cause whence they originated had been removed. A retrograde step is not readily recovered: and albeit that a reactive movement had begun to be manifested after awhile, it was not until a new impetus had been given by Confederation that positive im-

provement became a reality. The liberal terms of union agreed upon, and the energetic measures to fulfil them since pursued by the Administration, have restored that confidence in our future which had before been shaken. Meanwhile evil reports had been spread abroad, either from interested motives, or by disappointed speculators, who abused the land in order to screen their own want of energy or misconduct. Books, too, of a certain class, were written with a view to the mercenary penny; and these were seasoned with all manner of exaggeration and mis-statement, in order the better to sell. Yet no public steps were taken to counteract the misrepresentation; and if any one at a distance learnt possibly aught of the truth about the Country, it was by accident rather than of design. Even our Gold, large as the yield has been, has never been credited, in the public records to British Columbia. Shipped hence to San Francisco, on its way Eastward, it is re-shipped thence, and reaches England ostensibly as the return of California. So, too, with our noble spars: *Oregon Spars* have long had a reputation in the European markets: and because British Columbia happens to be near to Oregon (or rather to that division of it now called Washington Territory) her spars reach England as "Oregon Spars."* In short, save to the favoured few, British Columbia seems to stand almost in the position of an unknown land. The great majority, if asked, would probably assign it a place "somewhere between the Equator and the North Pole," and there end the geographical definition.

Yet wherefore complain of this flagrant ignorance regarding our own comparatively insignificant Province—insignificant, that is, save prospectively—when even the vast resources of California are scarcely recognised? Few, outside of the mercantile world or the circle of well-read students, realise to themselves the fact that San Francisco—a paltry village twenty-five years ago,—is now a city of maritime importance

* Of this fact an amusing illustration recently appeared in one of the local prints.

equal to that of many famed sea-ports of the Old World—the mercantile capital of a State of surpassing opulence. In direct connexion with it, extending northwards, are the thriving communities of Oregon—itself an opulent State; the Territory of Washington; and last, if not least in importance, British Columbia.* To show the large interests developed in these States on the Pacific slope, if not to gratify the curiosity of the reader, the following statement, taken from a recent Oregon newspaper, may not be without interest, nor irrelevant to the general question.

“ According to the latest reports, we now have 2,239 miles of railroad on the Pacific Coast, constructed and equipped at a cost of \$174,322,000, as follows :—

| | Miles completed. | Cost and Equipment. |
|------------------|------------------|---------------------|
| California | 1,111 | \$76,902,000 |
| Nevada | 567 | 51,500,000 |
| Utah..... | 312 | 35,400,000 |
| Oregon | 199 | 7,900,000 |
| Washington | 50 | 2,620,000 |
| | 2,239 | \$174,322,000 ” |

To this it may be added that, possibly ere these pages meet the eye of the reader, the extension of the Washington line will be completed to Olympia, at the head of Puget Sound, fifteen hours of steamer from Victoria. A continuous railway system will then be in operation from that point to New York. It is to be borne in mind that the great results of which these improvements are indicative, have been produced within the last quarter-century. Gold, despise it theoretically as we may, has been the miraculous lever which, symbolical of the wished-for lever of Archimedes, has raised this new world on the Pacific from obscurity. Gold, too, has been the primary means through which British Columbia has been elevated : is it too much to infer that, with her varied advantages, and the great enterprises contemplated and in actual progress, a

* I might add Alaska, the Territory on our north-western frontier, recently accruing to the United States by purchase from the Russians.

development proportionate to that witnessed elsewhere likewise awaits her?

I mentioned incidentally just now the *Spars* of British Columbia; and I am thereby reminded that, in the text, less has been said upon this source of wealth than its importance merits. The tree (*Abies Douglasii*,* or Douglas Fir of Lindley) already referred to, which produces the material so valuable among our Provincial industries, is peculiar to the northern portion of Oregon, to Washington Territory, and the greater portion of British Columbia. It is, however, only in the Coast region that it attains gigantic proportions: elsewhere it is comparatively small. Stray specimens are found as high as between five and six thousand feet above the sea-level; but these are stunted and scrubby.† In the Appendix will be found tables illustrative of the tenacity of fibre and flexibility of this now-celebrated timber, as compared with other similar woods; § and I subjoin a memorandum with which I have been recently favoured of the dimensions of the spars usually prepared for the several markets.

For the French Government masts of very large size are demanded, varying from 22 ins. to 44 ins. in diameter: for the English market, generally from 34 ins. down to 11 ins. In both cases they are dressed octagonally for shipment. Those from 24 inches downwards, intended for yards, are

* Named by Dr. Lindley in honor of the late David Douglas—a name too well-known in scientific circles, in connexion with the botany of the North-west Coast, to require more than mention. Poor Douglas, after passing some years in the Columbia, at the Forts of the Hudson's Bay Company, went to the Sandwich Islands, and lost his life Hawaii. His remains were found, fearfully gored, in a pit-fall into which he had been accidentally precipitated by the failure of the ground at the edge, and in which a wild bull had been previously taken. Curiosity had apparently attracted him to the treacherous proximity.

† I state this on the authority of Dr. Lyall, formerly of the British N. A. Boundary Commission, as given in the proceedings of the Linnean Society, Vol. VII. I do not remember having myself remarked these trees at so great an elevation.

‡ See Appendix E.2.

cut in the ratio of 4 feet of length to the inch of diameter: the larger sizes, for masts, in the proportion of 3 feet to the inch. For the China market the sizes required are about the same as those for England; but these last are generally shipped in their natural proportions, the bark only being taken off. To complete the cargoes, the ships usually carry large quantities of plank, sawn expressly for decks, which are supplied, free from knots, from 20 to 100 feet in length.

From the above an estimate may be formed of the stupendous growth of the Douglas Fir in the coast vicinage; and, in connexion with the test of the quality of its timber elsewhere given, of its value in a mercantile point of view. In further illustration I add the following extract, which I find quoted from a London paper, of date some ten years back. "Since our last a further example of this tree has arrived at the International Exhibition, from British Columbia. It consists of ten horizontal sections of that tree, 309 feet high, to which we formerly alluded, and of which a drawing has been suspended in the building. They are about to be displayed in the Court of British Columbia, and serve to show unmistakably what a noble tree this is, and how superb an ornament as well as inexhaustible source of wealth to the two Colonies."—[Viz.: British Columbia and Vancouver Island, at that time separate.]

Before concluding, it may perhaps be expected that I should say a few words respecting the Island of San Juan, which, in view from the house-tops of Victoria, and in close proximity with Vancouver Island, has always been claimed by the British as a dependency, in common with all the archipelago lying west of the Strait of Rosario. An unfortunate ambiguity in the wording of the Treaty of 1846, usually called the *Oregon Treaty*, has, however, led to an international dispute as to what interpretation is to be put upon the meaning of the framers, by the term "dividing channel"; the British having always understood thereby the Rosario Strait, the only ship-channel navigated at the time;

the United States contending, more recently, for that since surveyed, and now known to be practicable, called the Strait of Arro—immediately contiguous to the main island of Vancouver. In 1859 the dispute came to a crisis; the American General in command in Oregon having landed a military force and thus claimed their asserted rights. At first the matter wore rather a threatening aspect for the international peace. The prudence of the British Admiral on the station, Sir Robert L. Baynes, however, prevented a collision, which the proceeding was only too well calculated to provoke. A Company of the Royal Marine Light Infantry was landed at another point in assertion of the British claim. Subsequently the disavowal by the American Government of the action of their General, and his removal from the command, remedied to some extent the soreness that was at first experienced. Since then, by joint consent, both parties have maintained the occupation; and it is gratifying to know that the relations between the rival commands have been invariably of the most cordial nature. This strange condition of things, however, is about to terminate. By the Treaty of Washington of 1870 the case has been referred for arbitration to the Emperor of Germany, whose decision may be shortly expected. In pursuance of this subject I need only quote the following words from a recent speech of the Prime Minister of Canada, Sir John A. Macdonald. "That [the San Juan question] is settled in a way that no one can object to. I do not know whether many honorable members have ever studied that question. It is a most interesting one, and has long been a cause of controversy between the two countries. I am bound to uphold, and I do uphold, the British view respecting the channel which forms the boundary, as the correct one. The United States Government were, I believe, as sincerely convinced of their own case. Both believed they were in the right, both were firmly grounded in that opinion; and such being the case there was only one way of it, and that was to leave it to be

The writer must conclude with a personal explanation—at no time a graceful act, but which under the circumstances seems inevitable. The distant reader, for whom alone such explanation will be necessary, may possibly enquire as to the conditions which justify the writer in advancing, at times, unqualified opinions upon certain subjects, to render which of authentic value, long experience, and peculiar opportunities for observation, must be pre-established. To forestall all probable conjecture on this point he may at once state, that since his youth, for the last forty years—more than two-thirds of his life-time—he has been a sojourner in various parts within the vast angle included by the Columbia River, and the Rocky Mountains: first as a Clerk, then as a Chief-Trader and Wintering-Partner, of the Hudson's Bay Company under the old *régime*; and afterwards as a rather unsettled “settler”—till for some years past near Victoria, where he is now, probably, permanently at home. Thus there are few nooks, within the area in question, which he has not either visited in person, or of which he has not indirectly acquired a knowledge. In treating the subject the retrospect has been at times a painful one: for if, as may be imagined, during the earlier period

* Speech of Sir John A. Macdonald, K.C.B., in the House of Commons of Canada. 3rd May, 1872.

he may have passed some anxious intervals amid the scenes he has attempted to describe, he has also spent very many happy days, of which the memory alone remains to him.

Nessun maggior dolore,
Che ricordarsi del tempo felice
Nella miseria.—

Nevertheless, he has the consolation to think, that the region of his former wanderings, already the scene of the active industries of civilization, will ere long teem with a numerous and happy population: and if to this end the foregoing pages shall anywise tend to contribute, he feels that he will at least not have been without usefulness in his generation.

ROSEBANK, VICTORIA, B. C.,

August, 1872.

APPENDIX.

APPENDIX A.

*Extract from a Memorandum by the late James M. Yale,
Esquire, formerly of the Hudson's Bay Company, relating
to the Fraser River Salmon.*

"I believe, and think it may be asserted as a fact, that none of the several kinds of Salmon, including *Hones*, entering Fraser River and the smaller streams, ever return to the sea. The large and superior kind called by the natives *Sâ-quy* (*Kase* of the text) enter the river in May or June, but do not, it would seem, make so great a rush to reach the end of their course as the smaller kind, called by the Quâitlins *Suck-ky* (*Tâlo* of the text). This species enter the river generally about the beginning of July, and are followed in September, some seasons earlier, by the *Sâ-wen* (Fall Salmon), paler in color of flesh and somewhat larger than the *Suck-ky*. When taken in season they are found to be an excellent fish. With these come, late in autumn, a few of large size called *Paque*, differing from the *Sâ-quy* only in their flesh being whiter, head smaller, and body broader in proportion. Another white-fleshed fish called *Qua-lo*, having the external parts broadly striped or barred with a pale yellowish green and a dark brown color, some years enter Fraser River in great plenty, and are nearly equal in size to the *Sâ-quy*. They have more the resemblance of the other Salmon, and are a better flavored fish than the *Hunnuns* (or *Hones*)."

Mr. Yale, the writer of the above remarks, was for many years in command at Fort Langley, near the entrance of Fraser River, and had therefore peculiar opportunities for observation, as regarded the Lower River.

APPENDIX B.

Exports from Alberni, Barclay Sound, in the year 1862.

| | |
|-------------------------------------|--------------|
| Rough Lumber, 7,804,000 feet..... | \$85,844 00 |
| Dressed do. 270,000 feet..... | 5,400 00 |
| Four cargoes Spars, value | 28,673 00 |
| Oil, 5,000 gallons @ 40 cents | 2,000 00 |
| Furs and Skins | 1,000 00 |
| <hr/> | |
| | \$122,917 00 |

The working of these mills has since been suspended.

APPENDIX C.

Declared Value of Exports of Lumber from the Province of British Columbia in the year 1871.

| | |
|--|--------------|
| To England, 1 ship (including Spars \$2,000)..... | \$4,672 00 |
| To the Colonies : | |
| New South Wales, 3 ships | 8,904 00 |
| New Zealand 1 ,, | 5,100 00 |
| Victoria 3 ,, | 13,596 00 |
| Cape of Good Hope 1 ,, (including Spars \$500).... | 3,538 00 |
| To Foreign Countries : | |
| Batavia 1 ,, | 4,823 00 |
| Chili 10 ,, (including Spars \$1,100) .. | 59,671 00 |
| China 6 ,, | 26,402 00 |
| Peru 10 ,, | 49,742 00 |
| Sandwich Islands 4 ,, (portions of cargoes) | 5,784 00 |
| United States..... | 258 00 |
| TOTAL 40 ships | \$182,490 00 |

APPENDIX D.

*Declared Amount of Shipments of Coal in the year 1871
(Value at the wharf \$6 per ton).*

| | TONS. |
|---|-----------|
| To San Francisco | 13,704 |
| Portland, Oregon | 1,632 |
| Port Townsend, Washington Territory | 162 |
| Honolulu, Sandwich Islands | 4,860 |
| Tons..... | 20,358 |
| Value.. | \$122,148 |

Shipped for Home Consumption.

| | TONS. |
|---|------------------------------|
| To Victoria (approximate amount) | 5,300 |
| Casual supplies to Steamers (ditto) | 4,150 |
| Approximation from { Tons..... | 9,450 |
| the data of 6 months { Value... \$56,700 | |
| TOTAL..... | 29,808 Tons, Value \$178,848 |

The above statement is from the Custom-House Returns; the following, since published, is taken from the *British Colonist* newspaper. In both the British ton of 2,240 lbs. is intended.

*Nanaimo Coal Exports for the half-year ending
30th June, 1872.*

| | TONS CWT. |
|-----------------------|----------------------|
| San Francisco | 14,135 00 |
| Honolulu..... | 1,300 00 |
| Mazatlan..... | 600 00 |
| Portland | 597 10 |
| Oonalaska | 332 00 |
| Victoria | 4,601 00 |
| Steamers calling..... | 3,981 00 |
| New Westminster | 41 00 |
| TOTAL..... | 25,587 10 |

It is to be noted that during the last half-year the import duty upon coal entering the United States from abroad has been reduced from \$1.25 to 75 cents per ton, to which the increased demand apparent is doubtless in some measure ascribable. Anthracite coal enters free of duty.

APPENDIX E.

*Declared Value of Exports of Furs, Oil, &c., in the year
ending December, 1871.*

| | |
|----------------|-----------|
| Furs | \$246,387 |
| Fish Oil | 22,440 |
| Wool | 10,875 |
| Hides..... | 4,197 |
| Fish | 14,584 |
| Tallow..... | 336 |

APPENDIX F.

Shipment of Gold, product of the British Columbia Mines during the year 1871.

| | | |
|-----------------|-------------|----|
| January | \$109,898 | 26 |
| February..... | 57,309 | 97 |
| March | 64,583 | 01 |
| April | 56,779 | 50 |
| May | 134,360 | 36 |
| June..... | 102,302 | 32 |
| July | 82,681 | 13 |
| August | 149,023 | 48 |
| September | 138,184 | 90 |
| October | 128,409 | 47 |
| November | 158,304 | 81 |
| December | 167,743 | 62 |
| | | |
| TOTAL..... | \$1,349,580 | 83 |

As under :—

| | | |
|------------------------------------|--------------|----|
| Wells, Fargo, & Co..... | \$372,408 | 11 |
| Bank of British North America..... | 383,645 | 87 |
| Bank of British Columbia | 593,526 | 85 |
| | | |
| | \$1,349,580 | 83 |
| Previous Shipments :— | | |
| 1858 | \$ 337,765 | 00 |
| 1859..... | 1,211,339 | 00 |
| 1860..... | 1,303,329 | 00 |
| 1861..... | 1,636,870 | 00 |
| 1862..... | 2,167,183 | 00 |
| | | |
| | 6,656,486 | 00 |
| 1863 } Approximate. | | |
| 1864 } No separate returns | 5,688,741 | 00 |
| 1865 } | | |
| 1866..... | 1,625,311 | 19 |
| 1867..... | 1,850,651 | 04 |
| 1868..... | 1,780,587 | 08 |
| 1869..... | 1,324,871 | 84 |
| 1870..... | 1,002,717 | 65 |
| | | |
| | 7,584,138 | 80 |
| GRAND TOTAL..... | \$21,278,946 | 63 |

The foregoing may be accepted as a correct Return as far as the records show: but it does not convey a just impression of the whole gold-produce of the Country, owing to the large amounts taken away in private hands, the aggregate of which it is impossible to estimate. For this statement I am indebted to F. Garesche, Esq., Agent in Victoria of Messrs. Wells, Fargo, & Co.

APPENDIX G.

BRITISH COLUMBIA SAVINGS BANK.

Statement of the position of the British Columbia Savings Banks, at 31st December, 1871, published pursuant to the provisions of the "Savings Banks Ordinance, 1869."

GENERAL BALANCE.

| LIABILITIES. | ASSETS. |
|---|---|
| Due by Bank to Depositors, viz.:— At Head Office.....\$103,350 98 , Nainamo Branch.....11,740 56 , New Westminster Branch 12,606 13 , Yale Branch 650 80 , Cariboo Branch 4,052 87 Balance at credit of Profit and Loss | Cash in hand at Head Office and Branches ... \$ 2,703 92 Do. in Bank of British Columbia 5,817 71 Amount invested with the Government of British Columbia 125,000 00 \$132,401 34 1,120 29 \$133,521 63 |

Victoria, British Columbia,
February 23rd, 1872.

(Signed)

F. J. ROSCOE, } Commissioners of
A. J. LANGUAGE, } Savings Banks.

APPENDIX H.

Rates of Wages current in Victoria, May, 1872.

Carpenters, \$3.50 to \$3.75 per diem.

Blacksmiths, }
Bricklayers, } \$5 to \$6 per diem.
Plasterers, &c }

Female Servants: Nursemaids, \$12 to \$15; Cooks, &c., \$20 to \$25 per month.

Men-servants (Chinese), \$20 to \$25 per month.

Laborers, scarce at \$30 to \$35 per month, with board.

APPENDIX I.

Rates of Passage.

By Sailing Ship, from England to Victoria, Cabin, £60 @ £70 (120 to 160 days). 2nd do. £30 @ £35

By Steamer, viâ Panama, from New York to San Francisco (about 3 weeks):

Cabin,..... \$100 Currency = to about \$90 in gold.
Steerage..... 50 " = 45 "

By Steamer, from San Francisco to Victoria (3 to 4 days):

Cabin..... \$30 in gold.
Steerage 15 "

By Rail, from Chicago to San Francisco (about 7 days):

First Class..... \$118 Currency = to about \$106 in gold.
2nd Class..... 85 " = 76.50 "
And about \$25 Currency for meals, beds, &c.

Exchange.

£20 deposited in London would at present be worth, payable in Victoria, \$4.85 per £ Sterling; i. e. would buy a draft payable in Victoria at sight for \$97.

Interest.

Money is worth from 9 to 12 per cent. per annum, with good security—say an average of 10 per cent. For temporary loans of small amount, higher rates can be obtained.

APPENDIX K.

*Abstract of Meteorological Register kept at Fort McLoughlin,
Milbank Sound, B. C., Lat. 52° 6' N., Long. 128° 10' W.,
during the years 1833-34-35.*

| | Fahrenheit's Thermometer. | | | Rainy Days. |
|----------------|------------------------------|------|------|----------------|
| | Mean. | Max. | Min. | |
| 1833. | | | | |
| September ... | 57° 47' | — | — | — |
| October | 48 69 | — | — | — |
| November..... | 45 00 | — | — | — |
| December..... | 37 82 | — | — | — |
| 1834. | | | | |
| January | 28 00 | 42° | 5° | 4 |
| February | 38 00 | 52 | 30 | 12* |
| March | 40 00 | 56 | 31 | 5 |
| April..... | 49 00 | 62 | 48 | 15 |
| May | 53 00 | 63 | 48 | 22 |
| June | 60 00 | 81 | 55 | 11 |
| July..... | 60 00 | 78 | 56 | 12 |
| August | 62 00 | 76 | 63 | 17 |
| September ... | 60 00 | 79 | 63 | 16 |
| October | 52 00 | 68 | 47 | 25 |
| November..... | 46 00 | 57 | 38 | 19 |
| December ... | 37 00 | 48 | 26 | 12 |
| 1835. | | | | |
| January | 36 00 | 48 | 32 | 18 |
| February | 38 00 | 54 | 22 | 11 |
| March | 38 00 | 49 | 35 | 25 |
| April..... | 43 00 | 51 | 39 | 27 |
| May | 48 00 | 64 | 38 | 18 |
| June | 56 00 | 80 | 49 | 13 |
| July..... | 58 00 | 71 | 51 | 10 |

Assuming the mean of the month of August, 1834, to complete the series, the above Observations show a mean for the two years of 48° 04. The isothermal line of the mean annual heat of 50° Fahrenheit must therefore be assumed to strike the Coast at some intermediate point between this and New Westminster—probably about the northern end of Vancouver Island. The observations from which the foregoing abstract was made were commenced by the writer, and continued by Dr. W. F. Tolmie, now of Victoria.

Abstract of Meteorological Observations taken on board Her Majesty's Ship Topaze, at Esquimalt, Vancouver Island.

Quarter ending 30th June, 1860.

| | |
|-------------------------------------|--------------|
| April, mean daily heat | 51°50 Fahrn. |
| May " " | 55 25 |
| June " " | 61 00 |
| | — |
| Mean of the Quarter..... | 55° 59 |
| July " " | 60°50 |
| August " " | 63 25 |
| September, " " | 57 25 |
| | — |
| Mean of the Quarter..... | 60° 33 |
| October " " | 53°00 |
| November, " " | 50 50 |
| December " " | 42 00 |
| | — |
| Mean of the Quarter..... | 48° 50 |
| 1861. | . |
| January " " | 38°00 |
| February " " | 44 50 |
| March " " | 46 00 |
| | — |
| Mean of the Quarter..... | 42° 83 |
| | — |
| Mean Heat of the Year | 51° 81 |

The above Abstract is taken from an Essay on Vancouver Island by Dr. Charles Forbes, R. N., published in Victoria in 1862. In the same work other tables are given relating to Observations on land, but without the authorities. These, however, contain obvious discrepancies, and I do not therefore reproduce them. In these the minimum of temperature noted is $14\frac{1}{2}$ degrees of Fahrenheit, the highest 84° , at 2 P.M. The last, given as a maximum, and as occurring on the 26th June—certainly not a hot month—differs so widely from the observations of others, as to shake my confidence in the whole series.

Table of Meteorological Observations taken by order of Col. R. C. Moody, R.E., at the station of the Royal Engineers at New Westminster, B. C., in the year 1862.

Latitude $49^{\circ} 12' 47''$ 5 N. Longitude $122^{\circ} 53' 19$ W.

INCHES.

| | |
|--|----------------------|
| The highest reading of the Barometer, corrected for temperature, was..... | 30.517 9th February. |
| The mean height, do., do., at 9.30 A.M. | 29.983 |
| Do. do. do. at 3.30 P.M. | 29.963 |
| The lowest do. do..... | 29.071 22nd January. |

DEGREES.

| | | |
|--|-----------|--------------------------|
| Max. temp. in sun's rays (black bulb)... | 104.0 | 29th August. |
| Do. do. of Air, in shade | 88.5 | do. |
| Do. do. do. 9.30 A.M. | 73.9 | 23rd July. |
| Do. do. do. 3.30 P.M. | 86.0 | 28th August. |
| Mean temp. of Air in shade ... | 9.30 A.M. | 46.8 |
| Do. do. do. 3.30 P.M. | 51.5 | |
| Min. temp. of Air in shade | 9.30 A.M. | 2.0 below zero, 15 Jan. |
| Do. do. do. 3.30 P.M. | 6.0 | 15th January. |
| Min. temp. on the Grass | | 15.0 below zero, 16 Jan. |
| Greatest amount of Humidity | | 1.000 |
| Mean do. do. 9.30 A.M. | .842 | |
| Do. do. do. 3.30 P.M. | .772 | |
| Least do. do. | .320 | |

The cistern of the Barometer is about 54 feet above the level of the sea. All the observations were made at 9.30 A.M. and 3.30 P.M. daily throughout the year.

There were slight frosts nearly every night in the month of April, and once in May (16th); they did not recommence until the 9th of October. The severe frosts of January and February have been unknown for many years.

Thunder and Lightning occurred on the 24th May, 24th July, and 22nd, 29th, and 30th August.

Table shewing the depth of rain, the number of days on which it fell, the mean humidity (9.30 A.M. and 3.30 P.M.), mean temperature of the air in shade, and the lowest temperature on the grass in each month.

| Inches. | Days: | THERMOMETER. | | | Min. |
|--------------------|----------|--------------|-----------|-----------|-------|
| | | Humidity. | 9.30 a.m. | 3.30 p.m. | |
| January ... 3.480 | 9 | .855 | 19.0 | 23.0 | -15.0 |
| February ... 5.727 | 8 | .815 | 30.3 | 34.2 | 2.0 |
| March 5.830 | 17 | .862 | 38.0 | 41.7 | 23.0 |
| April 2.345 | 14 | .767 | 45.5 | 51.3 | 26.0 |
| May 3.475 | 13 | .718 | 57.1 | 62.1 | 31.5 |
| June 2.760 | 10 | .712 | 62.7 | 67.1 | 40.0 |
| July..... 2.700 | 12 | .713 | 63.2 | 67.7 | 44.0 |
| August 2.930 | 8 | .787 | 63.5 | 69.8 | 43.0 |
| September. 1.625 | 9 | .751 | 58.4 | 62.7 | 33.5 |
| October.... 4.605 | 10 | .869 | 49.3 | 52.9 | 23.0 |
| November.. 4.050 | 8 | .938 | 37.9 | 41.7 | 22.0 |
| December.. 7.990 | 17 | .948 | 36.7 | 39.7 | 18.5 |

Total 47.466 135

Rain fell on 8 days when the wind was South, 4—S.W., 3—W., 5—N.W., 8—N.E., 43 E., 26 S.E., and 38 when calm.

The greatest fall of rain in 24 hours measured 2.260 inches, and was on the 20th March. The average fall for every day of the year was 0.130 inches, and for each wet day it was 0.352.

The amount of Ozone this year was very small, its mean daily number would be represented by 3 on the scale, and it seldom exceed 6. During the greater part of October, November, and December there was little indication of its presence. In November and the early part of December there were heavy fogs, during which there was no Ozone.

COMPARISON OF MEAN RESULTS FOR THREE YEARS.

| Years | Rain. | | Mean Temperature. | | Min. on grass. | Humidity. | | Mean height of Barometer. | |
|-------|--------|------|-------------------|----------|----------------|-----------|----------|---------------------------|----------|
| | inches | days | 9.30 A.M | 3.30 P.M | | 9.30 A.M | 3.30 P.M | 9.30 A.M | 3.30 P.M |
| 1860 | 54.420 | 151 | 49.9 | 54.0 | 15.5 | .847 | .766 | 20.942 | 29.919 |
| 1861 | 60.485 | 164 | 48.8 | 52.2 | 10.0 | .764 | .854 | 29.943 | 29.889 |
| 1862 | 47.466 | 135 | 46.8 | 51.2 | -15.0 | .842 | .772 | 29.983 | 29.963 |
| Means | 54.124 | 150 | 48.5 | 52.5 | | .818 | .797 | 29.956 | 29.924 |

Rain was more equally distributed throughout all the months this year than in 1860 or 1861.

In the winter months, January to March, and October to December, 31.682 inches of rain fell in 1862, 41.230 in 1861, and 40.586 in 1860. In the remaining months 15.785 inches fell in 1862, 19.255 in 1861, and 13.834 in 1860.

The prevailing direction of the wind during rain in each year was E. and S.E. The absolute limiting nights of frost in the three years were nearly the same.

THE FRASER RIVER AT NEW WESTMINSTER.

| Year. | Highest level. | Lowest level. | Difference of level. | Remarks. |
|-------|----------------|---------------|----------------------|---|
| 1860 | 12th June | 4th Mar. | 10.5 feet | 22 May to 12 Aug. ships did not swing to |
| 1861 | 8th June | 17th Mar. | 9.5 feet | 19 May to 10 Aug. ditto. [the flood tide. |
| 1862 | 14th June | 19th April | 10.5 feet | 1 May to 2 Sept. ditto. |

Ice appeared on the 1st January, 1862, and the river at New Westminster was unnavigable on the 4th; it was completely frozen over on the 9th, and the ice attained a thickness of 13 inches in the channel opposite the R.E. Camp, on the 12th of February. Sleighs were running from Langley to several miles below New Westminster, and persons walked from Hope to the latter place, a distance of 80 miles, on the ice, at the end of January. Lake Harrison and the other Lakes were frozen. Navigation from New Westminster was open to the mouth of the river on the 11th of March, and from Yale on the 12th April. Again on the 5th of December, there was ice in the river at New Westminster for one day. In January, 1861, there was ice at New Westminster, but the navigation to the mouth of the river was not impeded. In 1860 there was no ice.

The observations were taken by 2nd Corporal P. J. Leech and Lance Corporal J. Conroy, R.E.

(Signed) R. M. PARSONS, Captain, R.E.

*Abstract of Meteorological Observations taken at Lillooett,
Fraser River, 1862, by Dr. H. Featherstonehaugh.*

Fahrenheit.

January.—Average Temperature for 22 days..... 14° above zéro

Do. do. 9, 9° below ,

Coldest day, 29th 22° , ,

| | | |
|-------------------|--|----------------|
| January.— | Hottest day | 26° above zero |
| | Ten cold windy days, from N.W. to N.E. | |
| | Total amount of snow, at intervals, 28 in. | |
| | [N.B. This represents the amount of snow as it fell, not as it lay on the ground after becoming compacted. It may be added that the winter of 1861-2 was one of extraordinary severity.] | |
| February.— | Average Temperature for 18 days | 25° above zero |
| | Do. do. 10 , , 4° below , , | |
| | Coldest day, 1st..... 6° , , " | |
| | Hottest day, 11th..... 45° above , , | |
| | 11th, heavy rain and thaw; 4 days heavy rain and thaw, three cold windy days. | |
| | Amount of snow fell during the month, 14 inches. | |
| March.— | Average Temperature for 31 days..... 37° | |
| | Coldest day, 10th 20° sharp frost | |
| | Hottest day, 31st..... 50° | |
| | Three cold windy days; two rainy days, 14th and 23rd. | |
| | Amount of snow fell, 10 inches. | |
| April.— | Average Temperature for the month | 54° |
| | Coldest day, 4th | 31° |
| | Hottest day, 30th | 84° |
| | Seven cold windy days; 14th gale from S.E. | |
| May.— | Average Temperature for the month | 78° |
| | Coldest day, 6th | 64° |
| | Hottest day, 11th..... 100° | |
| | Two windy days; 4 rainy days; 5th, eight hours heavy rain. | |
| June.— | Average Temperature for the month..... 81° | |
| | Coldest day..... 60° | |
| | Hottest day..... 104° | |
| | Three windy days; rain fell on 4 days. | |
| July.— | Average Temperature for 12 days | 97° |
| | Coldest day, 2nd | 80° |
| | Hottest day, 5th..... 106° | |
| August.—(Absent.) | | |
| September.— | Average Temperature for the month .. 81° | |
| | Coldest day, 30th | 60° |
| | Hottest day, 2nd | 98° |
| | Rain fell on 6 days; 25th, rain and snow; 5 windy days; 30th, cold S.E. wind. | |
| October.— | Average Temperature for the month..... 71° | |
| | Coldest day | 50° |
| | Hottest day..... 81° | |
| | Rain fell on 6 days; six windy days. | |
| November.— | Average Temperature for the month ... 48° | |
| | Coldest day..... 30° | |
| | Hottest day..... 56° | |
| | Rain fell on two days, 1st and 3rd. | |
| December.— | Average Temperature for the month ... 38° | |
| | Coldest day, 6th..... 25° | |
| | Hottest day, 25th | 50° |
| | Rain fell on 4 days; 9th, eight hours rain; five inches of snow fell during the month. | |

[The above Abstract is quoted from a work on British Columbia by the Rev. R.C.

Lundin Brown, M.A., Minister of St. Mary's Lillooett. By the terms "Coldest" and "Hottest" day, I presume the after-meridian limit is intended. Lillooett is situated on the bank of the Fraser, about 40 miles above the confluence of the Thompson, in Latitude $50^{\circ} 41' 49''$; elevation above the sea, 692 feet, as established by the Officers of the Royal Engineers. Some of the readings, I may remark, are so excessively high as to lead to the conclusion that an allowance should be made for reflected heat.]

APPENDIX L.

Memorandum of the Terms of Union of the Province of British Columbia with the Dominion of Canada.

COPY OF A REPORT OF A COMMITTEE OF THE HONORABLE THE PRIVY COUNCIL.

The Committee of the Privy Council have had under consideration a Despatch, dated the 7th May, 1870, from the Governor of British Columbia, together with certain Resolutions submitted by the Government of that Colony to the Legislative Council thereof both hereunto annexed, on the subject of the proposed Union of British Columbia with the Dominion of Canada; and after several interviews between them and the Honourable Messrs. Trutch, Helmcken, and Carrall, the Delegates from British Columbia, and full discussion with them of the various questions connected with that important subject, the Committee now respectfully submit for Your Excellency's approval the following Terms and Conditions, to form the basis of a Political Union between British Columbia and the Dominion of Canada:—

1. Canada shall be liable for the Debts and Liabilities of British Columbia existing at the time of the Union.
2. British Columbia not having incurred debts equal to those of the other Provinces now constituting the Dominion shall be entitled to receive, by half-yearly payments in advance from the General Government, Interest at the rate of five per cent. per annum on the difference between the actual amount of its indebtedness at the date of the Union, and the indebtedness per head of the population of Nova Scotia and New Brunswick (\$27 77), the population of British Columbia being taken at 60,000.
3. The following sums shall be paid by Canada to British Columbia, for the support of its Government and Legislature, to wit, an Annual Subsidy of \$35,000 and an Annual Grant equal to 80 cents per head of the said population of 60,000, both half-yearly in advance, such Grant of 80 cents per head to be augmented in proportion to the increase of population, as may be shewn by each subsequent decennial census, until the population amounts to 400,000, at which rate such Grant shall thereafter remain, it being understood that the first census be taken in the year 1881.
4. The Dominion will provide an efficient Mail Service, fortnightly, by steam communication between Victoria and San Francisco, and twice a week between Victoria and Olympia; the Vessels to be adapted for the conveyance of freight and passengers.

5. Canada will assume and defray the charges for the following Services :—

- A. Salary of the Lieutenant Governor ;
- B. Salaries and Allowances of the Judges of the Supreme Courts and the County or District Courts ;
- C. The charges in respect to the Department of Customs ;
- D. The Postal and Telegraphic Services ;
- E. Protection and Encouragement of Fisheries ;
- F. Provision for the Militia ;
- G. Lighthouses, Buoys, and Beacons, Shipwrecked Crews, Quarantine and Marine Hospitals, including a Marine Hospital at Victoria ;
- H. The Geological Survey ;
- I. The Penitentiary ;

And such further charges as may be incident to and connected with the services which by the British North America Act of 1867 appertain to the General Government, and as are or may be allowed to the other Provinces.

6. Suitable Pensions, such as shall be approved of by Her Majesty's Government, shall be provided by the Government of the Dominion for those of Her Majesty's Servants in the Colony whose position and emoluments derived therefrom would be affected by Political changes on the admission of British Columbia into the Dominion of Canada.

7. It is agreed that the existing Customs Tariff and Excise Duties shall continue in force in British Columbia until the Railway from the Pacific Coast and the system of Railways in Canada are connected, unless the Legislature of British Columbia should sooner decide to accept the Tariff and Excise Laws of Canada. When Customs and Excise duties are, at the time of the Union of British Columbia with Canada, leviable on any Goods, Wares, or Merchandizes in British Columbia, or in the other Provinces of the Dominion, those Goods, Wares, or Merchandizes may, from and after the Union, be imported into British Columbia from the Provinces now composing the Dominion, or from either of those provinces into British Columbia, on proof of payment of the Customs or Excise Duties leviable thereon in the Province of Exportation, and on payment of such further amount (if any) of Customs or Excise Duties as are leviable thereon in the Province of Importation. This arrangement to have no force or effect after the assimilation of the Tariff and Excise Duties of British Columbia with those of the Dominion.

8. British Columbia shall be entitled to be represented in the Senate by three Members, and by six Members in the House of Commons. The representation to be increased under the provisions of the British North America Act, 1867.

9. The influence of the Dominion Government will be used to secure the continued maintenance of the Naval Station at Esquimalt.

10. The provisions of the British North America Act, 1867, shall (except those parts thereof which are in terms made, or by reasonable intendment may be held to be specially applicable to and only affect one and not the whole of the Provinces now comprising the Dominion, and except so far as the same may be varied by this minute) be applicable to British Columbia, in the same way

and to the like extent as they apply to the other Provinces of the Dominion, and as if the Colony of British Columbia had been one of the Provinces originally united by the said Act.

11. The Government of the Dominion undertake to secure the commencement simultaneously, within two years from the date of the Union, of the construction of a Railway from the Pacific towards the Rocky Mountains, and from such point as may be selected, East of the Rocky Mountains, towards the Pacific, to connect the Seaboard of British Columbia with the Railway system of Canada; and further, to secure the completion of such Railway within ten years from the date of the Union.

And the Government of British Columbia agree to convey to the Dominion Government, in trust, to be appropriated in such a manner as the Dominion Government may deem advisable in furtherance of the construction of the said Railway, a similar extent of Public Lands along the line of Railway throughout its entire length in British Columbia, not to exceed Twenty (20) Miles on each side of said line, as may be appropriated for the same purpose by the Dominion Government from the Public Lands in the North-west Territories and the Province of Manitoba. Provided that the quantity of land which may be held under Pre-emption right or by Crown Grant within the limits of the tract of land in British Columbia to be so conveyed to the Dominion Government, shall be made good to the Dominion from contiguous Public Lands; and provided further, that until the commencement, within Two Years as aforesaid from the date of Union, of the construction of the said Railway, the Government of British Columbia shall not sell or alienate any further portions of the Public Lands of British Columbia in any other way than under right of Pre-emption, requiring actual residence of the Pre-emptor on the land claimed by him. In consideration of the land to be so conveyed in aid of the construction of the said Railway, the Dominion Government agree to pay to British Columbia, from the date of the Union, the sum of \$100,000 per annum, in half-yearly payments in advance.

12. The Dominion Government shall guarantee the interest for Ten years from the date of the completion of the works, at the rate of Five per centum per annum, on such sum, not exceeding £100,000 sterling as may be required for the construction of a first-class Graving Dock at Esquimalt.

13. The charge of the Indians, and the trusteeship and management of the Lands Reserved for their use and benefit, shall be assumed by the Dominion Government, and a policy as liberal as that hitherto pursued by the British Columbia Government, shall be continued by the Dominion Government after the Union.

To carry out such policy, tracts of land of such extent as it has hitherto been the practice of the British Columbia Government to appropriate for that purpose, shall from time to time be conveyed by the Local Government to the Dominion Government in trust for the use and benefit of the Indians on application of the Dominion Government; and in case of disagreement between the two Governments respecting the quantity of such tracts of Land to be so granted, the matter shall be referred for the decision of the Secretary of State for the Colonies.

14. The Constitution of the Executive Authority and of the Legislature of British Columbia shall, subject to the provisions of the British North America Act, 1867, continue as existing at the time of the said Union until altered under the authority of the said Act, it being at the same time understood that the Government of the Dominion will readily consent to the introduction of Responsible Government when desired by the Inhabitants of British Columbia, and it being likewise understood that it is the intention of the Governor of British Columbia, under the authority of the Secretary of State for the Colonies, to amend the existing Constitution of the Legislature by providing that a majority of its Members shall be elective.

The Union shall take effect according to the foregoing terms and conditions on such day as Her Majesty by and with the advice of Her Most Honourable Privy Council may appoint (on addresses from the Legislature of the Colony of British Columbia, and of the Houses of Parliament of Canada, in the terms of the 146th Section of the British North America Act, 1867,) and British Columbia may in its addresses specify the Electoral Districts for which the first Election of Members to serve in the House of Commons shall take place.

Certified,

W.M. H. LEE,
Clerk Privy Council, Canada.

APPENDIX M.

Estimates of the total Expenditure of the Province of British Columbia for the year ending 31st December, 1872.

CIVIL GOVERNMENT.

1.—LIEUTENANT-GOVERNOR'S OFFICE.

| | |
|---|-------------|
| Private Secretary..... | \$ 1,452 00 |
| Messenger, also has charge of Government House..... | 600 00 |
| Office Contingencies..... | 100 00 |
| | |
| Total | 2,152 00 |

2.—COLONIAL SECRETARY'S DEPARTMENT.

| | |
|------------------------------------|----------|
| Colonial Secretary..... | 3,500 00 |
| Assistant Colonial Secretary | 1,940 00 |
| Clerk | 1,600 00 |
| Messenger | 600 00 |
| | |

| | |
|-------------|----------|
| Total | 7,640 00 |
|-------------|----------|

3.—PRINTING BRANCH.

| | |
|------------------------------------|----------|
| Superintendent | 1,320 00 |
| Printer | 960 00 |
| Assistant Printer | 640 00 |
| Assistant Printer (temporary)..... | 300 00 |
| | |
| Total | 3,220 00 |

4.—AUDIT BRANCH.

| | | |
|-------------------|-------|----|
| Audit Clerk | 1,600 | 00 |
|-------------------|-------|----|

5.—TREASURY BRANCH.

| | | |
|-------------------------------------|-------|----|
| Clerk in Charge (provisional) | 1,940 | 00 |
| Clerk | 1,452 | 00 |
| Total | 3,392 | 00 |

6.—LANDS AND WORKS DEPARTMENT.

| | | |
|------------------------------|--------|----|
| Chief Commissioner..... | 3,500 | 00 |
| Assistant Commissioner | 2,425 | 00 |
| Clerk of Records | 1,320 | 00 |
| Draughtsman | 1,320 | 00 |
| Accountant..... | 1,320 | 00 |
| Messenger and Clerk..... | 600 | 00 |
| Total | 10,485 | 00 |

7.—REGISTRAR GENERAL'S OFFICE.

| | | |
|----------------------------------|-------|----|
| Registrar General of Titles..... | 1,940 | 00 |
|----------------------------------|-------|----|

8.—ATTORNEY GENERAL'S DEPARTMENT.

| | | |
|------------------------|-------|----|
| Attorney General | 3,500 | 00 |
| Clerk | 1,600 | 00 |
| Total | 5,100 | 00 |

9.—EXECUTIVE COUNCIL.

| | | |
|-------------|-------|----|
| Clerk | 1,600 | 00 |
|-------------|-------|----|

10.—LEGISLATION.

| | | |
|---|--------|----|
| Mr. Speaker | 1,000 | 00 |
| Clerk of the House..... | 600 | 00 |
| Sergeant-at-Arms..... | 250 | 00 |
| Messenger (Assistant Printer)..... | 200 | 00 |
| Indemnity to Members, including Mileage | 7,800 | 00 |
| Expenses of Elections | 2,500 | 00 |
| Contingent Fund..... | 1,000 | 00 |
| Total | 13,350 | 00 |

ADMINISTRATION OF JUSTICE.

11.—SUPREME COURT.

| | | |
|--|-------|----|
| Registrar, "Courts Merger Ordinance, 1870" | 1,940 | 00 |
| Deputy Registrar, Do. | 1,940 | 00 |
| Usher | 600 | 00 |

| | | |
|-------------|-------|----|
| Total | 4,480 | 00 |
|-------------|-------|----|

12.—SHERIFF.

| | | |
|-------------------------------------|-------|----|
| High Sheriff (aid of Expenses)..... | 1,500 | 00 |
|-------------------------------------|-------|----|

POLICE AND GAOLS.

13.—VICTORIA.

| | | |
|--|-------|----|
| Clerk of the Bench..... | 1,500 | 00 |
| Warden of Gaol and Superintendent of Police..... | 1,752 | 00 |

| | |
|--------------------------------------|----------|
| Inspector (provisional) | 1,008 00 |
| Sergeant..... | 850 00 |
| Four Constables, at \$720 each | 2,880 00 |
| Gaoler..... | 1,104 00 |
| Do. Assistant..... | 912 50 |
| Superintendent of Convicts | 1,008 00 |
| Two Convict Guards | 1,277 00 |
| Two Door Guards..... | 1,095 00 |
| Cook | 638 75 |
| Medical Officer | 600 00 |
| | — |
| Total | 6,635 25 |

14.—NEW WESTMINSTER.

| | |
|---|----------|
| Stipendiary Magistrate and Superintendent of Assay Office | 2,425 00 |
| Two Constables at \$720 each..... | 1,440 00 |
| Gaoler | 1,104 00 |
| Turnkey | 708 00 |
| Medical Officer | 600 00 |
| Constable, Burrard Inlet..... | 600 00 |
| | — |
| Total | 6,877 00 |

15.—KOOTANAI AND COLUMBIA.

| | |
|--|----------|
| Gold Commissioner and Stipendiary Magistrate (to be appointed) | 3,000 00 |
| Clerk and Constable (Records, &c.)..... | 1,704 00 |
| Do. Do. French Creek..... | 1,704 00 |
| Two Constables at \$1,404 each..... | 2,808 00 |

| | |
|-------------|----------|
| Total | 9,216 00 |
|-------------|----------|

16.—CARIBOU.

| | |
|---|----------|
| Gold Commissioner and Stipendiary Magistrate..... | 3,000 00 |
| Clerk of Records..... | 1,940 00 |
| Chief Constable..... | 1,940 00 |
| Constable and Gaoler..... | 1,452 00 |
| Two Constables at \$1,008 each..... | 2,016 00 |
| Constable at Quesnel | 1,500 00 |
| Constable at Forks of Quesnel | 1,452 00 |

| | |
|-------------|-----------|
| Total | 13,300 00 |
|-------------|-----------|

17.—OMINECA (PROVISIONAL.)

| | |
|--|----------|
| Gold Commissioner and Stipendiary Magistrate | 3,000 00 |
| Clerk of Records..... | 1,940 00 |
| Constable | 1,500 00 |
| Constable at Port Essington..... | 1,000 00 |

| | |
|-------------|----------|
| Total | 7,440 00 |
|-------------|----------|

18.—HOPE, YALE, AND LYTTON.

| | |
|-------------------------------|----------|
| Clerk of the Bench, Yale..... | 1,500 00 |
| Constable and Gaoler, Do..... | 1,008 00 |
| Constable, Assistant, Do..... | 1,008 00 |
| Constable, Lytton..... | 1,008 00 |

| | |
|-------------|----------|
| Total | 4,524 00 |
|-------------|----------|

19.—LILLOOET AND CLINTON.

| | |
|---|-----------------|
| Clerk of the Bench and Constable, Lillooet..... | 1,500 00 |
| Do. Do. Clinton | 1,500 00 |
| Total | 3,000 00 |

20.—NANAIMO, COMOX, SALT SPRING, AND COWICHAN.

| | |
|---|-----------------|
| Clerk of the Bench, Nanaimo..... | 1,300 00 |
| Constable, Nanaimo..... | 732 00 |
| Constables, Comox, Cowichan, and Salt Spring Island, \$250 each..... | 750 00 |
| Total | 2,782 00 |

21.—ASSAY OFFICE.

| | |
|--|-----------------|
| Superintendent, New Westminster, (provided for as Stipendiary Magistrate) | |
| Chief Melter, Cariboo | 1,940 00 |
| Assistant Assayer Do..... | 900 00 |
| Indian Messenger, New Westminster..... | 96 00 |
| Chemicals, Fuel, &c..... | \$500 00 |
| Freight, &c..... | 350 00 |
| Total | 850 00 |
| | |
| Total | 3,786 00 |

22.—PENSIONS AND RETIRED ALLOWANCES.

| | |
|--|-----------------|
| Pension to Mrs. Ogilvy..... | 485 00 |
| 23.—ADMINISTRATION OF JUSTICE, ex. of Establishments. | |
| Summoning Jurors, Witnesses, &c..... | 1,000 00 |
| Prosecution, Interpreters' Fees, &c..... | 2,000 00 |
| Inquests, &c..... | 300 00 |
| Expenses of Registrars on Circuit..... | 1,000 00 |
| Criminal Punishments..... | 200 00 |
| Total | 4,500 00 |

24.—CHARITABLE ALLOWANCES.

| | |
|--|------------------|
| Hospital aid—Victoria..... | 4,500 00 |
| Do. New Westminster..... | 3,000 00 |
| Do. Cariboo..... | 4,000 00 |
| Destitute poor and sick throughout the Province..... | 1,000 00 |
| Total | 12,500 00 |

25.—IMMIGRATION

10,000 00

26.—EDUCATION.

Aid to District Schools

40,000 00

27.—POLICE AND GAOLS, exclusive of Establishments.

Keep of Prisoners and other Police Expenditure
throughout the Province.....

20,000 00

28.—RENTS.

| | |
|---------------------------------|--------|
| Government House, Victoria..... | 48 50 |
| Do., Lillooet | 120 00 |
| Boat House, Nanaimo..... | 36 00 |
| Gaol, Comox..... | 60 00 |
| Omineca..... | 300 00 |
| <hr/> | |
| Total..... | 564 50 |

29.—TRANSPORT.

| | |
|--|----------|
| The Lieutenant-Governor | 1,000 00 |
| Freight on Remittance of Treasure | 500 00 |
| Actual Travelling Expenses of Officers on Duty.... | 3,500 00 |
| Keep of Government Horses throughout the Province... | 300 00 |
| <hr/> | |

| | |
|-------------|----------|
| Total | 5,300 00 |
|-------------|----------|

30.—WORKS AND BUILDINGS.

| | |
|--|----------|
| Completion of Gaol at Nanaimo and purchase of Land.. | 1,000 00 |
| Construction of Court House, New Westminster..... | 2,500 00 |
| <hr/> | |
| Total | 3,500 00 |

31.—GOVERNMENT HOUSE, VICTORIA.

| | |
|---|----------|
| Repairs | 2,000 00 |
| Furniture | 1,500 00 |
| Water | 400 00 |
| Fuel and Light..... | 350 00 |
| Planting Grounds..... | 200 00 |
| Salary of Gardener, and assistance..... | 700 00 |
| Fencing..... | 250 00 |
| Incidentals..... | 100 00 |
| <hr/> | |
| Total | 5,500 00 |

32.—GOVERNMENT HOUSE, NEW WESTMINSTER.

| | |
|-------------------------|----------|
| Repairs | 500 00 |
| Fuel and Light..... | 150 00 |
| Gardener's Salary | 500 00 |
| Incidentals..... | 100 00 |
| <hr/> | |
| Total | 1,250 00 |

33.—REPAIRS TO PUBLIC BUILDINGS, PROVINCIAL.

| | |
|--|-----------|
| Government Buildings, Victoria..... | 1,500 00 |
| House of Assembly | 500 00 |
| Government Buildings, New Westminster | 300 00 |
| Do. Yale..... | 500 00 |
| Do. Lillooet and Clinton..... | 500 00 |
| Do. Cariboo | 750 00 |
| Do. Kootenay | 2,000 00 |
| Do. Omineca, Contingent..... | 2,000 00 |
| Miscellaneous Surveys throughout the Province..... | 5,000 00 |
| <hr/> | |
| Total | 13,050 00 |

| 34.—REPAIRS TO ROADS AND TRAILS THROUGHOUT THE PROVINCE. | |
|--|------------|
| Yale and Clinton Road..... | 20,000 00 |
| Clinton and Cameronton Road..... | 14,000 00 |
| Douglas and Clinton Road | 1,000 00 |
| Burrard Inlet Road..... | 1,200 00 |
| New Westminster and Yale Sleigh Road, including Bridge over Coquahalla River..... | 6,000 00 |
| Hope and Kootenay Trail | 3,500 00 |
| Lillooet and Lytton Trail | 1,500 00 |
| New Westminster District Roads and Trails, including False Creek, Coquitlam Creek, and Sumass Bridges | 5,650 00 |
| Trails, Cariboo District..... | 2,400 00 |
| Trail, Quesnel to Germansen Creek, by Nation River.... | 6,000 00 |
| Do. from the Western Coast to intersect same..... | 5,000 00 |
| Roads and Trails, Yale and Lytton District, including Bridge across Nicola River..... | 4,500 00 |
| Repairs to Road from Cache Creek to Savona's Ferry... | 2,000 00 |
| Road from Savona's Ferry to Okanagan..... | 15,000 00 |
| Repairs to Front Street, New Westminster..... | 750 00 |
| Esquimalt Road, including new Bridges..... | 9,000 00 |
| Victoria District Roads..... | 15,200 00 |
| Esquimalt District Roads and Trails, including Bridge across Sooke River..... | 7,150 00 |
| Cowichan District Roads and Trails..... | 8,200 00 |
| Nanaimo District Roads and Bridges..... | 5,000 00 |
| Comox Roads and Trails..... | 5,000 00 |
| Alberni to Nanaimo Trail, and from this point to Nanoose | 2,400 00 |
| <hr/> | |
| Total | 140,450 00 |

35.—MISCELLANEOUS SERVICES.

| | |
|--|-----------|
| Provincial Exhibitions | 500 00 |
| Insurance on all Government Buildings..... | 700 00 |
| Telegrams..... | 600 00 |
| Taking charge of Government Buildings, Douglas and Langley | 100 00 |
| Printing General Map of Province in England | 600 00 |
| Postage throughout the Province..... | 1,200 00 |
| Tools and Implements for Road making..... | 500 00 |
| Fire Department throughout the Province | 2,500 00 |
| Road Tax Commissioners..... | 700 00 |
| Grant to Mechanics' and Literary Institutes | 500 00 |
| Grant to Water Company, Victoria,..... | 7,000 00 |
| Miscellaneous Services not detailed..... | 2,000 00 |
| Stationery, Fuel, Light, etc..... | 6,500 00 |
| Gratuities to Officers whose services may be dispensed with | 2,000 00 |
| Appropriation for re-establishment of a Ferry at Lillooet | 3,000 00 |
| Appropriation to provide temporary accommodation for Lunatics | 5,000 00 |
| Copies of Official Maps for Registrar General of Titles.. | 400 00 |
| Copy of Dispatches for Dominion Government | 1,000 00 |
| <hr/> | |
| Total | 34,800 00 |

APPENDIX N.

Abstract of the probable Revenue of the Provincial Government of British Columbia, for the year 1872, showing also the Revenue received under the similar heads in the years 1870 and 1871.

| | Estimate of 1872. | Revenue for 1870. | Approximate Revenue of 1871. |
|--|----------------------|----------------------|------------------------------------|
| Dominion Subsidy.....\$ | 211,000 00 | ... | 107,000 00 |
| Roads' Tolls | ... | 39,302 18 | 48,865 00 |
| Land Sales..... | 6,000 00 | 8,087 03 | 22,665 00 |
| Land Revenue..... | 7,000 00 | 4,792 15 | 7,227 00 |
| Rents, exclusive of Land | 1,250 00 | 942 50 | 1,442 00 |
| Free Miners' Certificates..... | 10,000 00 | 8,940 00 | 11,612 00 |
| Mining Receipts, General | 12,000 00 | 14,955 00 | 19,148 00 |
| Licenses | 43,000 00 | 42,295 83 | 41,730 00 |
| Fines, forfeitures, & fees of Court | 6,000 00 | 7,067 51 | 11,454 00 |
| Fees of Office..... | 5,250 00 | 4,247 28 | 5,123 00 |
| Sale of Government property..... | 200 00 | 1,744 81 | 2,550 00 |
| Reimbursements in aid of Expenses incurred by Gov't | 7,837 00 | 16,108 01 | 941 00 |
| Miscellaneous Receipts | 200 00 | 256 28 | 887 00 |
| Arrears, Real Estate Tax | 6,000 00 | 820 00 | 6,233 00 |
| Arrears, Road Tax..... | 2,000 00 | ... | ... |
| Road Tax, 1872 | 6,500 00 | 6,563 87 | 5,946 00 |
| Interest on Canadian Stock, at 5 per cent., 9 months | 4,500 00 | ... | ... |
| | \$ 328,737 00 | 156,122 45 | 292,823 00 |

APPENDIX O.

At Barkerville, on the 20th ult., Mr. Thompson, M. P., addressed his constituents. In the course of his remarks, the hon. gentleman presented the following financial statement of the direct pecuniary benefit British Columbia had derived from union with Canada, which, we think, will be found to be approximately correct:—

Appropriations for British Columbia for 1872-3.

| | |
|---|-------------|
| Salary of Lieutenant-Governor..... | \$ 8,000 00 |
| Salary of Auditor..... | 5,000 00 |
| Salaries of Supreme and County Court Judges..... | 29,500 00 |
| Probable expense of Administration of Justice..... | 10,000 00 |
| Expense Collecting Customs..... | 20,000 00 |
| Mail Service—Ocean, \$54,000; Inland, \$50,000..... | 104,000 00 |

| | | |
|---|--------------------------|--------------|
| Lighthouses — Maintenance, | \$16,500 ; Construction, | |
| \$9,000 | 25,500 00 | |
| Telegraph Line—Subsidy and Maintenance..... | 29,000 00 | |
| Blasting Sister Rock..... | 7,000 00 | |
| Marine expenses..... | 2,000 00 | |
| Inland Revenue expenses..... | 2,000 00 | |
| Victoria Dredger expenses..... | 10,000 00 | |
| Steamer Sir James Douglas, expenses..... | 20,000 00 | |
| Building Custom House and Post Office, Victoria..... | 25,000 00 | |
| Building Marine Hospital..... | 20,000 00 | |
| Preliminary surveys for Penitentiary..... | 5,000 00 | |
| Indian Affairs..... | 20,000 00 | |
| Militia equipments, stores and expenses..... | 30,000 00 | |
| Grant towards Immigration | 5,000 00 | |
| | | \$377,000 00 |
| Subsidy in accordance with Union Terms..... | 214,000 00 | |
| Interest saved and Sinking Fund..... | 120,000 00 | |
| | | \$711,000 00 |
| Less probable receipts from Customs, now collected by the Dominion Government..... | 300,000 00 | |
| <i>—British Colonist, 4th August, 1872.</i> | | \$411,000 00 |

APPENDIX P.

Rates of Postage.

| | Letters $\frac{1}{2}$ oz. | Papers each. | Book Post Lowest Rate. |
|---|---------------------------|--------------|----------------------------|
| England..... | 6 cents | 2 cents | 9 cts. $\frac{1}{2}$ 4 oz. |
| Throughout the Province and Dominion | 3 " " | 1 " " | 1 ct. per oz. |
| United States..... | 6 " " | 2 " " | 1 " " " |
| Germany | 23 " " | 6 " " | 6 cts per 2 oz. |
| France | 34 " " | 5 " " | 5 " " " |
| Australia..... | 16 " " | 4 " " | |
| New Zealand..... | 16 " " | 4 " " | |
| China..... | 16 " " | 4 " " | } 2 cts per 1 oz. |

Money Orders with Canada and England.

APPENDIX Q.

Note referred to at page 46.

Since writing the statement in the text, the following memorandum has been handed to me by a practical farmer from the North of Scotland. I submit it in full confidence of its accuracy

Memorandum of crop on the farm of Mr. William Reid, Saanich, near Victoria, B. C. :—

1869.

| | | |
|--|-----|------------------|
| 13 acres of Oats gave 562 Imperial Bushels.... | 43½ | Bushels per acre |
| Average of Rough Barley, within a small fraction of..... | 55 | " " |
| Average of Chevalier Barley..... | 44½ | " " |
| Do Wheat (Spring) weight 66 lbs. | | |
| the Imperial Bushel..... | 41 | " " |

1870.

| | | |
|--|-----|-----|
| 15 acres Oats gave 735 Imperial Bushels..... | 44 | " " |
| Average of Rough and Chevalier Barley, not distinguished | 46½ | " " |
| Average of Spring Wheat..... | 38½ | " " |

Owing to uncommon drought the crop of 1871 was short of the above, which may be regarded as the probable return of fair average seasons, with good cultivation.

Mr. Reid states that on a neighboring farm in 1869 there were samples of Oats yielding upwards of 70 Bushels to the acre ; and on another farm a field of Wheat in, clayey bottom, that averaged 50 Bushels throughout.

APPENDIX R.

Extracts from the British Colonist Newspaper, referred to at Page 59.

FROM CACHE CREEK TO OKINAGAN.

The announcement (made in our advertising columns) that Mr. Barnard has placed a weekly line of passenger stages on the route between Cache Creek and Okinagan, connecting at the former point with the main trunk line to Cariboo, is suggestive of progress. The enterprise displayed by Mr. Barnard in thus following closely upon the heels of the road-makers is deserving of praise. The fact itself is calculated to arouse a people accustomed to think of the country as non-progressive,—standing stock still. A coach road from Cache Creek to Okinagan ! and a weekly line of stages on it !! This leads to enquiry about the country seemingly so suddenly opened up. And here we are made to feel our ignorance, —the little that is known about “the great interior.” We will tell the reader what little we know about the country penetrated

by Mr. Barnard's enterprise. From Cache Creek to Okinagan, a distance of about one hundred miles, [150] as the crow flies, six thousand head of cattle fatten upon nature's rich pastures. There is room for more than double that number. Calculating seven hundred pounds of beef to each animal, a low average as beeves go in that section, that would yield eight and a half million pounds of the finest beef in the world. In 1871 the yield of grain on the Tranquille, North and South Forks of the Thompson amounted to one and a quarter million pounds. That was the product of less than a tenth of the land held under pre-emption, the whole being seven thousand, six hundred and eighty acres, which should be capable of producing at least twelve million pounds. Of bacon, upwards of forty thousand pounds was cured. At one dairy, (Mr. Jones') two thousand, five hundred pounds of excellent butter was made. The Spellum-cheen Valley will produce fall wheat of the finest quality without irrigation, in consequence of a fine surface soil and clay subsoil. The Okinagan will yield only fall wheat without irrigation; spring wheat, oats, and barley, etc., in wonderful profusion with irrigation. The yield of wheat ranges from one and a quarter to one and a half tons per acre. As high as nine tons of potatoes has been taken from the acre. Wherever tried fruit trees have done exceedingly well, while those severer tests of climate, Indian corn, tomatoes, musk melons, water melons, and even the grape vine have been cultivated with great success and without having recourse to artificial expedients. The country is, for the most part open, dotted with trees giving it almost the appearance of an old country park. It is so free from wood as to enable the horseman to canter at will in almost every direction, and in some instances no obstructions are presented to the free progress of a carriage. The face of the country is beautiful—relieved by ever changing succession of hill and dale. The water system is excellent, the surface of the country being indented by numerous lakes and rivers or smaller streams, everywhere teeming with fish of excellent quality. A mild climate will have already been inferred. It may be added that snow seldom falls to any depth, and never lies long. Horses, horned cattle and sheep pass the winter unhoused and uncared for and, as a rule, come out in good condition in the spring. On most of the grass ranges cattle shifting for themselves through winter are in prime condition for beef in the spring. In the country thus roughly and very imperfectly sketched, there are a few hundred settlers—we really do not know how many. In the valleys of the Thompson, Okinagan, and Cache Creek, there are about one hundred children. There is the making of happy homes for tens of thousands. In truth no more desirable country can be found, and it is not unreasonable to hope that the opening of a coach road leading through the heart of it, and the facilities for travel presented by a weekly line of stages may lead persons in search of homes to go and see for themselves. The impression has gone forth that British Columbia is not, and can never be, an agricultural country. Without pausing to discuss the proper definition of the term, we will say, without fear of successful contradiction, that, although British Columbia may never become a large exporter of agricultural productions, she has at least within herself the means

of supporting a population of between two and three millions. This much may safely be said in respect of what is known. The unknown we leave to the future.

August 9, 1872.

APPENDIX R. R.

Since the remarks in the text were written, the following communication on the subject has been published :

MONTREAL, 13th May, 1872.

JAMES RICHARDSON, Esq.,

Geological Survey.

Sir :—At your request we have much pleasure in reporting upon the hops of British Columbia, a sample of which you favoured us with.

In our opinion they are of very superior quality, rich and fine in aroma. These hops resemble the California, and would be equally sure to find ready sale in this or other markets at the highest rates; they have been well dried and are in first rate condition.

Our estimate of the value of these hops is that they are worth fully 10 cents per pound more than the best Canadian growth, the prices of which, during the past season, ranged from 50 to 75 cents per pound according to demand. Exceptionally high prices, however. Yours faithfully,

WM. DOW & Co.

—*British Colonist newspaper, June, 1872.*

[The hops in question were raised in the vicinity of Victoria.]

APPENDIX S.

The following is the Official Advertisement inviting tenders for the construction of a Graving Dock at Esquimalt:

BRITISH COLUMBIA.

ESQUIMALT GRAVING DOCK.

The Government of British Columbia are prepared to receive Tenders for the construction of a Graving Dock, at the Naval Station, Esquimalt Harbor, under the guarantee provided in the Twelfth Section of the Terms of Union of this Province with the Dominion of Canada, which Section is in the following words:—

“The Dominion Government shall guarantee the interest for ten years from the date of the completion of the work, at the rate of five per cent. per annum, on such sums, not exceeding £100,000 sterling, as may be required for the construction of a first class Graving Dock at Esquimalt.”

The Dock to be of masonry, and of not less than the following dimensions:—

Length on floor, 370 feet,

Do. over all, 400 feet,

Width between copings, 90 feet,
 Do. on floor..... 45 feet,
 Do. of entrance..... 63 feet.

To afford a depth of water on the sill of not less than $26\frac{1}{2}$ feet at high water springs, and to be substantially constructed to the approval of the Government, upon a site to be provided by the person whose tender may be accepted.

Further particulars as to site, borings, &c., may be obtained from T. A. BULKLEY, Esq., Chief Engineer to Government, upon application in writing to the Chief Commissioner of Lands and Works.

Tenders must specify the time within which the Dock will be completed, and must be accompanied by drawings and descriptions showing exact dimensions, materials, and mode of construction of proposed Dock.

Tenders are to be sealed, superscribed "Tender for Esquimalt Graving Dock," addressed to the Chief Commissioner of Lands and Works, Victoria, British Columbia, and delivered at his Office before noon of the 15th day of November, 1872.

Persons who may consider the above guarantee to be insufficient are at liberty to tender on the basis of such supplemental guarantee by the Provincial Government, or upon such other financial inducements, as they may suggest.

The Government do not bind themselves to accept the lowest or any tender.

Each Tender must be accompanied by a Bond from the Contractor, and two sufficient sureties, for the payment of £10,000 to Her Majesty, Her heirs and successors, conditioned upon the due fulfilment of the Tender which it accompanies, provided it be accepted within three months from the said 15th of November.

By Command. GEO. A. WALKEM,
Chief Commissioner of Lands and Works.

Lands and Works Office,
Victoria, April 27th, 1872.

N.B. The date for the reception of Tenders has since been extended to noon of 31st December.

APPENDIX T.

Prices of some articles of Farm Produce in Victoria during the past Season.

| | |
|---|--------------------------|
| Oats, per 100 lbs..... | \$2 00 @ 2 50 |
| Barley, Rough, per 100 lbs..... | 2 25 @ 2 50 |
| Do Chevalier, " " | 2 50 @ 2 75 |
| Wheat, " " | 2 25 @ 2 75 |
| Potatoes, " " | 1 50 @ 2 00 |
| Eggs per dozen, 30 to 50 cents, at Christmas..... | 1 00 |
| Butter, fresh, per lb..... | 40 @ 62 $\frac{3}{4}$ c. |
| Oxen for beef, dressed weight, per lb..... | 12 @ 16 cts. |
| Swine, fattened, " " " | 12 @ 13 cts. |
| Hay per ton of 2000 lbs..... | \$20 @ \$30 |
| Hops, per lb..... | 25 to 60 cts. |

N. B. Under the former tariff, recently superseded by the General Tariff of the Dominion, an import duty of 30 cents per 100 lbs. was levied on Barley and Oats; on Wheat, 35 cents per 100 lbs.; and on Potatoes, 50 cents per 100 lbs.

APPENDIX V.

Present prices in Victoria of some Articles of Ordinary Family consumption.

| | |
|---|--------------------|
| Sugar, Sandwich Islands No. 1, per lb..... | 12½ cts. |
| Do. Do Lower qualities, per lb..... | 9, 10 & 11 c. |
| Refined, per lb..... | 17@20 cts. |
| Tea, from 35 to 75 cents according to quality. | |
| Tea, Japan, per lb..... | 75 cts. |
| Coffee, Raw " | 20@30 cts. |
| Flour, extra fine, per bbl. of 200 lbs..... | \$7 00@7 50 |
| Do fine, in sacks..... | 6 00 |
| Do ordinary " | 5 00 |
| Bacon, per lb., Chicago 20 cts. Home..... | 25 cts. |
| Butter salt, per lb., California 30 cts, Home 40 cts. Fresh | 50 cts. |
| Beef, fresh, per lb..... | 12½@18 c. |
| Pork, " " | " " |
| Mutton, " " | " " |
| Fish of various kinds, per lb..... | { 6 to 8 c. at the |
| Salmon, " " | regular shops |

N. B. Fish can be obtained from the natives very cheaply. Salmon from 25 to 50 cents each, or from 1 to 2 cents per lb.; when very abundant, cheaper. Oysters, too, very cheaply.

| | |
|---|-----------|
| Salted Salmon per bbl. of 200 lbs..... | \$ 7 00 |
| Do. Oolâhans " " " | 7 00 |
| Syrup, refined, per keg of 5 gallons..... | 5 75@6 00 |
| Molasses, Sandwich Island, per gallon | 30 |

Clothing generally, including duty, at a moderate advance on Invoice; Canadian manufactures of course enter duty free.

All importations are under the General Tariff of Canada. On the 1st July, among other proposed reductions, Tea and Coffee will come in duty free.

N. B. The consumption of Sugar (except refined) is met almost entirely by importations direct from the Sandwich Islands—the quality very superior. From the same source there is also a considerable importation of other produce, including Oranges, Bananas and other semi-tropical fruits. The chief supply of flour has hitherto been from Oregon; but in the Interior a sufficiency is now manufactured to meet the local demand, or nearly so, the Indian population being great consumers. From San Francisco, among other productions, are imported Oranges, Grapes, &c., in great profusion during their season, together with native wines of very good quality. Other foreign wines, since the reduction of the

high duty till recently imposed, are procurable at a moderate advance for the importer's profit. So of malt liquors from London. Excellent beer is, however, brewed in the Province at a rate rather in advance of the ordinary English price.

APPENDIX W.

Hospitals.

There are three Public Hospitals in the Province, supported by private contributions with Government aid. One at Victoria, another at New Westminster, the third in Caribou.

In addition to these there is the Naval Hospital at Esquimalt for the accommodation of H. M.'s fleet; and in Victoria a private hospital supported by the French Benevolent Society.

APPENDIX X.

Theatre.

The Theatre, though small, is sufficiently commodious for the present. There is no regular Management, and the performances are dependent on the visits of occasional *troupes*, some of no mean ability, who annually visit Victoria. Prominent among these performers may be mentioned the late Charles Kean and Mrs. Kean, who performed here for a series of nights some years ago, under invitation. Amateur theatricals and concerts are occasionally performed for the promotion of special objects: and among its other utilities, the Theatre is frequently the arena of Public Meetings, when of course much fervid eloquence "splits the ears of the groundlings."

APPENDIX Y.

Gas and Water.

Victoria is adequately supplied with the former by a Company incorporated for the purpose; and with water, by pipes laid down by another Company, supplemented by carts—the source of supply being certain springs on a ridge near the town. Surveys are now in progress with the object of introducing a more copious supply from a lake, distant some six miles from the town.

APPENDIX Z.

A table of Latitudes and Longitudes of some places in British Columbia, as determined by the Royal Engineers.

| Station. | Latitude North. | Approx. Long. West. |
|---|--------------------|------------------------|
| Alexandria, | 52°33' 40" | 122°26' 56" |
| Anderson, | 50 32 13 | 122 35 22 |
| Antler, | 52 58 44 | 121 26 22 |
| Asananny, | 52 24 40 | 126 30 7 |
| Beaver Creek, Cut off Valley, | 51 7 6 | 121 39 59 |
| Beaver Lake, Sellers' Hotel, | 52 29 19 | 121 55 4 |
| Beaver Pass house, Lightning Creek, | 53 3 58 | 121 52 49 |
| Bridge River, mouth, | 50 45 33 | 122 3 53 |
| Bridge Creek house, | 51 39 2 | 121 24 58 |
| Campment du Chevreuil, | 49 20 57 | 121 8 34 |
| Cameron's Farm, 12 m. from Cottonwood | 53 1 38 | 122 14 28 |
| Campment des Femmes, | 49 32 29 | 120 45 28 |
| Chanthopeen Lake, | 52 8 53 | 124 30 43 |
| Cottonwood, | 53 0 33 | 122 5 7 |
| Cokelin, | 52 22 41 | 125 50 24 |
| Douglas, | 49 45 20 | 122 11 4 |
| Esquimalt, V. I., Duntze Point, | 48 25 49 | 123 26 46 |
| (Fort Colvile, U. S.,) | 48 38 3 | 118 7 19 |
| Fort George, | 53 53 29 | 122 45 1 |
| Fountain, | 50 44 44 | 122 1 26 |
| Garry Point, | 49 7 5 | 123 11 17 |
| Green Lake, opposite Crescent Island, | 51 23 4 | 121 29 9 |
| Harrison River, Mouth, | 49 14 25 | 121 54 34 |
| Hat River, Mouth, | 50 54 7 | 121 33 30 |
| Hope, | 49 22 21 | 121 27 58 |
| Keithley, | 52 45 21 | 121 28 32 |
| Ko-om-ko-otz, | 52 22 36 | 126 47 34 |
| Lake La Hache, East end, (camp) | 51 49 41 | 121 35 57 |
| Lake La Hache, West end, | 51 51 50 | 121 44 10 |
| Langley Barracks, | 49 12 9 | 122 35 14 |
| Lillooet, Court House, | 50 41 49 | 122 2 28 |
| Lillooet Lake, 29-mile house, | 50 3 0 | 122 35 42 |
| Lytton, | 50 13 45 | 121 40 19 |
| Marmot Lake, | 53 0 25 | 121 35 33 |
| New Westminster, | 49 12 47 | 122 53 19 |
| Nimpoh, (camp) | 52 22 51 | 125 13 48 |
| North River, opposite mouth, | 50 39 3 | 120 27 20 |
| Okinagan Lake, head of, | 50 21 13 | 119 26 35 |
| Osoyoos Lake, | 49 1 52 | 119 36 55 |
| Pavillon Mountain, North base, | 50 59 15 | 121 58 37 |
| Pemberton, | 50 17 32 | 122 43 15 |
| Puntzee, | 52 12 10 | 124 2 24 |
| Quesnel River, mouth, | 53 0 17 | 122 27 6 |
| Quesnel River, Lower Ferry, Donaldson's | 52 58 15 | 122 26 52 |

| Station. | | Latitude North. | Approx. Long. West. |
|--------------------------------------|-------|--------------------|------------------------|
| Quesnel River, Forks, | - - | 52°39' 42" | 121°42'52" |
| Round Prairie, Phillips' Farm, | - | 52 47 57 | 122 23 49 |
| Richfield, Court house, | - - | 53 3 9 | 121 33 55 |
| Salmon River, Grand Prairie, | - | 50 28 34 | 119 47 35 |
| Seton, | - - - | 50 40 18 | 122 5 47 |
| Seton Lake, West end, | - - | 50 42 25 | 122 26 43 |
| Shtooiht, | - - - | 52 21 36 | 126 5 16 |
| Snowshoe house, 7 miles from Antler, | - | 52 55 0 | 121 27 22 |
| Swift River, mouth, | - - - | 53 7 39 | 122 28 34 |
| Tahartee Lake, | - - - | 52 24 32 | 123 2 49 |
| Vanwinkle, Court house, | - - - | 53 1 31 | 121 44 42 |
| Vermillion Forks, | - - - | 49 27 42 | 120 28 52 |
| Williams Lake, Court house, | - | 52 9 24 | 122 13 32 |
| Yale, | - - - | 49 33 44 | 121 25 58 |

APPENDIX A-2.

Table showing the Approximate Altitudes above the Sea of some places in British Columbia from Observations by Officers of the Royal Engineers.

| CENTRAL DISTRICT. | FEET. |
|--|-------|
| Boston Bar settlement..... | 472 |
| Court-House at Lytton..... | 780 |
| Thompson's River—mouth of the Nicola..... | 788 |
| The Lakes (Venables')..... | 2,170 |
| Ashcroft Farm (Cornwall's)..... | 1,508 |
| Bounaparte River—mouth of Maiden Creek..... | 1,905 |
| Summit Altitude of trail from Green Lake to Bridge Creek.. | 3,660 |
| Bridge Creek House..... | 3,986 |
| Lake la Hache..... | 2,488 |
| Deep Dreek (South) at the Crossing..... | 2,255 |
| Court-House, William's Lake..... | 2,135 |
| The Springs Farm..... | 1,850 |
| Soda Creek crossing..... | 1,690 |
| Mud Lake..... | 2,075 |
| Fort Alexandria, Fraser level..... | 1,420 |
| Summit Altitude of trail from Mud Lake to Beaver Lake.... | 3,300 |
| Beaver Lake—Sellers' Hotel..... | 2,110 |
| The "Green timber," South limit..... | 2,880 |
| Little Lake House..... | 2,535 |
| Summit of trail thence to Quesnelle Forks..... | 3,375 |
| Quesnel City | 1,958 |
| Mitchell's Bridge, North branch of Quesnel River .. | 2,120 |

CARIBOU DISTRICT.

FEET.

| | |
|--|-------|
| Caribou Lake..... | 2,566 |
| Snow-shoe Creek, Leon's house..... | 4,920 |
| Snow-shoe Peak | 6,130 |
| Snow-shoe Mountain, Leon's house | 5,844 |
| Antler Creek Settlement..... | 4,010 |
| Milk Farm, Malony's | 4,490 |
| Summit of trail over Mount Agnes to Lightning Creek..... | 5,850 |
| Marmot Peak..... | 6,310 |
| Marmot Lake..... | 5,540 |
| Richfield Court-House..... | 4,216 |
| Van Winkle Court-House | 3,654 |
| Cottonwood | 2,530 |

| | |
|---|-------|
| Fraser River, at Mouth of Quesnel River | 1,490 |
| Do. at Mouth of Swift River..... | 1,530 |
| Do. at Fort George..... | 1,690 |

BY THE LILLOOET ROUTE.

| | |
|--|-------|
| R. E. Observatory, New Westminster..... | 54 |
| Harrison Lake..... | 71 |
| Douglas Court-House..... | 125 |
| Hot Spring House (Temp. of Spring, 130°—Dr. Seddall, R.E.) | 474 |
| Lillooet Lake..... | 620 |
| Summit Lake..... | 1,482 |
| Anderson Lake..... | 958 |
| Seton Lake..... | 898 |
| Fraser River at Lillooet (June level) | 692 |
| Fountain..... | 1,291 |
| Capt. Martley's Farm-house..... | 2,505 |
| The Grotto, <i>Pavillon</i> Mountain | 3,989 |
| Summit of Road, do. do. | 5,012 |
| 46th Mile Post, Cut-off Valley..... | 2,973 |
| Cut-off stream near head of Valley | 2,340 |
| Buonaparte River at the Mound..... | 2,144 |
| Junction of do. with Hat River..... | 1,686 |
| Head of Great Chasm..... | 3,653 |
| Immediately below in Chasm..... | 2,724 |
| Green Lake | 3,164 |

BY THE BENTINCK ARM ROUTE.

| | |
|---|-------|
| Nookeetz (ruined village) | 107 |
| Asananny do. | 227 |
| Nooskultzt do. | 316 |
| Nootkleia (inhabited village)..... | 392 |
| Shtooiht (Springs) | 464 |
| Foot of Great Slide on Atnah-coh River..... | 1,110 |
| Summit of the Great Slide..... | 2,230 |
| Summit of the Mountain above the Slide..... | 2,890 |
| Hotharko Brook, at foot of Precipice..... | 2,490 |
| Summit of the Precipice..... | 3,840 |
| Nimpoh | 3,601 |
| Lake Towteestsan..... | 3,580 |

| | FEET. |
|--|-------|
| Summit Altitude of the trail on the Plateau..... | 4,360 |
| Summit Lake..... | 4,020 |
| Lake Chantslar | 3,820 |
| Lake Chanthopeen | 3,780 |

[N.B.—The Bentinck Arm route has been abandoned for some years.]

APPENDIX B-2.

Extract referred to at page 86.

A visit to Nanaimo, the seat of King Coal, never fails to impress observant and reflecting persons with fresh consciousness of the power which that sable monarch is destined to wield on the North Pacific. The Vancouver Coal Company are opening up the Nanaimo Mines very extensively. Douglas Pit, a largely productive mine, is still competent to, and for the most part does, supply present demand. But, in anticipation of increased demand, works are being rapidly developed at various other points. The deep pit, three hundred feet below the surface, will win several square miles of coal. Workmen have only just commenced to drive out from the bottom of this shaft and are crossing what in mining parlance is termed a "fault," which has somewhat dislocated the strata immediately above and below the seam. But the coal, although contorted considerably, is of excellent quality; and indications are met with only a few feet from the pit bottom showing that the termination of the "fault" cannot be far off. The seam is from six to eight feet in thickness, and will continue to turn out the "Black Diamond" for an indefinite period. On Newcastle Island the same Company have a splendid prospect. Here there are two seams being worked into,—the one known as Newcastle, the other the Douglas. Both of these seams crop out near the water's edge, and are in every respect just as conveniently situated for working and shipping as one could well conceive or wish a coal mine to be. Newcastle seam is from eight to nine feet in thickness, and a "heading" is driven into it two hundred and fifty yards by way of exploration. This mine is fully ready to yield a regular out-put of excellent coal. The Douglas seam is explored by slope two hundred and seventy yards from the surface, the coal improving in thickness as the depth increases. At the bottom of the slope, the formation is divided into two parts,—thus: three and a half feet of coal, and two and a half feet of indurated clay, and over the clay there are three feet of coal. As the slope deepens, the fire-clay grows thinner, and experienced miners argue confidently, from this gradual convergence of the two seams of coal, that they will be found to join not far off. There appears to be no reasonable ground of doubt as to the extent and continuity of these Island coals, as both seams are found in proper position on both sides of the Island. Wharf accomodation, and the best and most

complete appliances and facilities for shipping the coal are being projected and provided as fast as the works can be proceeded with. Other explorations for deep coal are about to be made. It will be impossible to dwell upon the very complete, substantial, and extensive character of the Company's works and machinery. These might well occupy an entire article. Were we to stop here, the reader would receive a very inadequate impression as to the extent of the coal measures at Nanaimo, and the amount of enterprise applied to their development. The Wellington Coal Mine (perhaps more generally known as the Dunsmuir Mine) on Departure Bay, about three miles above the town of Nanaimo, must not be accounted as amongst the least important of our coal workings. Here the indomitable perseverance of Mr. Dunsmuir was rewarded by finding a seam of very superior coal, having a thickness ranging from eight to thirteen feet, and in a position highly favorable to profitable development. This mine is about three miles distant from the point of shipment on Departure Bay and has been worked for more than a twelvemonth. A very substantial wooden tramway has been constructed from the mine to the water, where large and commodious wharves have been built. At present the coal is transported in trams drawn by horses; but the enterprising manager has resolved that in the course of another year the wooden rail shall be superseded by the iron, and the horse by the locomotive steam engine. This cursory and necessarily very incomplete sketch may suffice to show that British Columbia possesses great coal stores and that she is not altogether unprepared to meet the greatly increased demand almost certain very soon to be made upon these stores. It also points to the great importance of Nanaimo, the Newcastle of the Dominion."—*British Colonist*, August 15th, 1872.

APPENDIX C-2.

Notes regarding the Stone-quarry at Nanaimo. From the "British Colonist" newspaper—August, 1872.

"Nanaimo is endowed with greater natural wealth than, perhaps, any other part of the wide Dominion of Canada. Her coal measures already opened formed the subject of a recent article. Her coal stores still locked might fill a book. In these practically inexhaustible stores Nanaimo possesses a power which must compel Commerce and Manufacture to kneel at her feet. But Nanaimo has a mine of wealth of a different kind—the Newcastle Stone Quarry. This quarry has been worked for upwards of two years, and yet it may be said to be scarcely opened. Here are several square miles of a continuous formation of the best free-stone to be found anywhere on the coast. No more conclusive evidence of the superiority of this stone need be sought than the fact that the United States Mint at San Francisco is made of it. The mint cost considerably over a million and a half, and absorbed eight thousand

tons of the Newcastle stone. The introduction of this stone for so important a purpose naturally aroused a certain amount of local jealousy and brought out some international prejudice. The consequence was that the stone was subjected to a rather more severe test than would otherwise have been the case. It is gratifying to learn that the United States Inspector has, in his recent final report, given the stone the highest character. To possess a stone quarry so superior in every respect as to command the patronage of San Francisco and overcome the prejudices of the Great Republic is something of which Nanaimo may justly be proud. We have said that the San Francisco Mint took eight thousand tons of this stone. In addition to this it took a large quantity of flagging-stone for court-yard, side-walks, and cellar. In the eight thousand tons were some pieces deserving of specific notice. There were six columns, twenty-eight feet long, by four feet two inches square. These columns were faultless throughout. There were two stones for corner pediment fifteen tons each, and two key stones of fourteen tons each. One circumstance has tended seriously to lessen the profits of the quarry. Every stone going to make up the eight thousand tons for the mint has been of specific dimensions; and in quarrying to fill the order a great deal of such stone as would be used for smaller buildings or for rubble masonry has gone to waste owing to there being no demand for it. Of this waste stone there has been enough to realize fifty thousand dollars in a market presenting a local demand for it. And yet it has not yielded fifty cents. Nay, to remove it out of the way has cost thousands of dollars. We have said that the quarry is scarcely fairly opened. The last cargo of stone sent to San Francisco has been pronounced of a superior quality to that previously sent. It is well understood that the quality of the stone improves as you go in. The quarry has now an excellent and carefully prepared "face" on it, from which stone may be taken superior in point of quality to any yet quarried, and of almost any conceivable dimensions. Columns fifty feet long (or one hundred if necessary) by four and a half feet thick can be supplied, without flaw or fault in them; or if necessary, blocks fifteen feet square can be taken out. This quarry is doubtless destined to exert more or less influence upon the character of our public buildings. Amongst other things the Federal Government have undertaken to erect a Custom-house, Post-office, Penitentiary, and Marine Hospital in this Province. It is of no little importance that the Newcastle Quarry, so convenient and accessible for shipping, stands prepared to supply the necessary stone for these; and the facilities thus presented for obtaining the larger sections of the finest stone will doubtless encourage the Dominion Government to indulge in a class of architecture that might be considered unattainable under less auspicious circumstances. When the United States authorities have sent all the way to Nanaimo for stone to construct the mint at San Francisco, the Dominion Government cannot well entertain the idea of employing less desirable material in the construction of the Federal buildings here. Persons visiting Nanaimo should not come away without "doing" Newcastle Quarry. A visit to it will repay the trouble, and will always be rendered en-

joyable by the kind hospitality and courteous attentions of the deservedly popular proprietor, J. G. Dawes, Esq., and of the no less popular manager, Mr. Nightingale."

APPENDIX D-2.

The following table of Approximate Distances and Times I find quoted from the work of Dr. Rattray, R. N., noticed in Appendix G-2.

DISTANCES FROM HONG KONG TO ENGLAND BY THE DIFFERENT ROUTES.

| | Geo. Miles. | Days. |
|---|-------------|-------|
| Distance by Cape of Good Hope (Hong Kong to Southampton)..... | 12,000 | 110 |
| Distance Overland by Suez (Hong Kong to Southampton) | 9,467 | 50 60 |
| Distance by British Columbia (Hong Kong to Southampton), by steam and railway | 11,121 | 36 |

DISTANCES FROM SYDNEY TO ENGLAND BY THE DIFFERENT ROUTES.

| | |
|---|---------------|
| Sydney to Southampton by Cape of Good Hope..... | 11,880 miles. |
| Do. do. by Suez..... | 11,219 " |
| Do. do. by Cape Horn..... | 12,746 " |
| Do. do. by Panama..... | 11,115 " |
| Do. do. by Vancouver Island | 11,794 " |

APPENDIX E-2.

Notes Regarding the quality of the Timber yielded by the Douglas Fir.

The following extract is taken from Dr. Charles Forbes' Essay:—

The Flexibility, Resistance, and Density of Masts from Vancouver Island compared with Masts from Riga:

The principal quality of these woods is a flexibility and a tenacity of fibre rarely met with in trees so aged ; they may be bent and twisted several times in contrary directions without breaking.

Several poles of the greatest length having the end at the foot, and the top of the tree cut off, were tried comparatively with poles

of the same dimensions cut from a Riga spar of first-class, and the following result was found :

| | |
|-------------------------------------|--------------------|
| Maximum degree of bending } | Vancouver Pine. |
| before rupture at the foot } | 0m 025..... 0m 028 |
| At the head..... | 0 019..... 0 016 |
| Mean..... | 0 022..... 0 022 |
| Charge of rupture (per centimeters) | |
| Squared at the foot.....} | 23k 75..... 21k 00 |
| At the head..... | 16 11..... 19 68 |
| | 19 93..... 20 23 |
| Density of wood at | |
| the foot of the tree. } | 0 636..... 0 726 |
| Density at the head..... | 0 478..... 0 532 |
| | 0 555..... 0 629 |

These experiments give a mean almost identical, for the bending and breaking of the two kinds of wood, while the density differs notably to the advantage of the Vancouver wood.

The only question still undecided is that of durability. The masts and spars of Vancouver are woods rare and exceptional for dimensions and superior qualities, strength, lightness, absence of knots and other grave vices.

"Toulon," September 21, 1860. Signed, L. A. SYLVESTER, Du Perron, Chief Engineer of 3d Section.

The following from an Essay by the Rev. R. C. L. Brown.

The following extract from the *Gardener's Chronicle*, is given by a recent number of the *British Columbian* newspaper:

"The remarks lately made in our columns on the very great value of the DOUGLAS FIR, have led one of the most skilful of our judges of timber to favour us with the following highly important information. This fir wood, MR. WM. WILSON SAUNDERS, F. R. S., of Lloyd's, has had many opportunities of examining carefully; and, in order to satisfy one of our largest importers, he has made some careful experiments on its strength and flexibility in comparison with other similar woods. The following table, with which he has favored us, gives the result, which is in the highest degree satisfactory. Mr. Wilson Saunders has a regular machine for these experiments, and the results can be implicitly relied on.

Lengths of the woods enumerated in the following table, carefully squared to $1\frac{1}{4}$ inch, were submitted to pressure of weights pendent from the centre, the lengths being supported between standards exactly 6 feet apart. The weight at which each broke and the amount of deflection from the horizontal line at the time of breaking, are given in the following table:

| | lbs. | Inches. | |
|--------------------------|------|---------|---------------------------|
| Douglas Fir..... | 280 | 4 | Fracture, rough and long. |
| Pitch Pine..... | 280 | 4 | " short and even. |
| Canada Spruce..... | 196 | 4.7 | " short and rough. |
| Red Pine..... | 168 | 6 | " rough. |
| Larch—British..... | 168 | 5.2 | " short and even. |
| Deodar from Himalaya.... | 154 | 3.8 | " short. |

The specimens experimented upon were carefully selected from the best description of wood, and free from all defects. The deflection is given in inches and tenths of an inch. Each wood had two trials, and the figures give a mean result."

Dr. Lindley commenting on these tables goes on to say:

"It will be thus seen that none of the FIRS approached in strength the Douglas or the Pitch Pine; it having required the weight of 280 lbs. to break a small bar of their wood, no more than an inch and a quarter square. A hundred and sixty-eight pounds broke a piece of British Larch of the same scantling. Moreover, between the Douglas Fir and Pitch Pine, whose strength was equal, there is this great difference, that while the latter snapped short under a pressure of 280 lbs., the Douglas yielded unwillingly with a rough and long rend."

APPENDIX F-2.

Note P. S. referred to at page 67.

The winter of 1835-36 is here referred to. Crossing the Rocky Mountains from Tête Jaune's Cache to Jasper's in September, on foot, I had returned with a party of some 22 persons, with horses. After embarking in our canoes and descending Fraser River a few miles, we were ice-bound—the winter being premature in an un-wonted degree—about the 23rd of October. Short of provisions, and unable to make our way downwards owing to the unequally frozen condition of the stream, we made a *cache* of the canoes and their contents, at a point noted in Arrowsmith's map, and retraced our steps to Jasper's—the snow being about nine inches deep at the Summit of the Pass. The supplies obtainable at Jasper's were inadequate to our wants; and we had to continue our retreat down the Athabasca, and across to Edmonton on the Saskatchewan. There we obtained copious supplies, with dog-sledges to convey them. Leaving some of the party there, to follow in the Spring, we set out on our return. We had experienced some little difficulty on the way down: but the return-trip, being now provided with snow-shoes, warm clothing, and plenty of pemican, was performed with comparative comfort,—the journey from Edmonton to Stuart's Lake occupying only 46 days. It was on this return trip that the observations noted in the text were made. The depth of the snow for a short distance at the summit of the Pass was about eight feet—but it was melting very fast at the period of our passage, about the 1st January, and there was a warm rain falling.

This thaw, as shewn in the text, was repeated (an interval of two days' cold having been meanwhile experienced) below Tête Jaune's Cache: and I conjecture was likewise repeated at the summit, where we had first experienced it. It may be added that the thaw in question, as we afterwards ascertained, was not experienced in the lower parts of Fraser River, remote from the mountains, where continuous cold, of remarkable severity, had prevailed throughout.

The object, it may be explained, of the communication at that time maintained through the Tête Jaune Pass, was for the occasional conveyance of dressed Moose-leather, supplied from the abundance of the Saskatchewan, for the use of Stuart's Lake and the surrounding Posts, where it was much in demand. Hence the route in question has been frequently called the *Leather-Pass*.

APPENDIX G-2.

Before concluding, the Writer thinks it well to append a memorandum of the principal Works treating directly or indirectly of the subject in issue which he can recall to memory, and from which much valuable information can be obtained. From this list, he has designedly excluded the book of a Mr. McDonald, who wrote, professing to give an account of British Columbia, some years ago. The Writer has no desire to criticise the work in question, which, indeed, he has had no opportunity of judging, save from extracts that have been largely quoted by the Press: but these extracts convey an impression so utterly at variance with the observations of others, that, were the contrary not known, he might have inferred that the Author had never set foot within the Province. The valuable work of Lord Milton and Dr. Cheadle will, however, have since corrected many of the false impressions which the former work was calculated to convey; and the only object in here noticing Mr. McDonald's production is to put those on their guard who may have imbibed such impressions through reading it, without having subsequently met with the salutary corrective.

For a similar reason the Writer proceeds to notice a commentary on the climate of a portion of British Columbia which appeared some years ago; and which, as emanating from a higher and better-known authority, was calculated, if uncorrected, to convey an impression more permanently injurious. The passage in question appeared in the *Colonization Circular* of 1861, and was from the pen of Mr. John Maclean, formerly a Wintering Partner of the Hudson's Bay Company, and now residing in Canada. The Writer's attention was called to the subject, semi-officially, by the Governor of the period, the present Sir James Douglas: and he in consequence wrote a reply to the remarks, which was, it is presumable, officially employed and is here reproduced.

VICTORIA, V. I., January 3, 1862.

SIR,—My attention has been directed to a passage in a recent number of the *Colonization Circular*, having reference to the climate of Stuart's Lake in British Columbia. I notice it the more readily since it stands in juxtaposition to another passage in which my own name appears.

When Mr. McLean mentions his having witnessed so great a variation of temperature during a single day, he omits, (as quoted) to advise his readers that such a day was an exceptional instance and not the rule. So far from presenting anywise an ungenial climate, Stuart's Lake is an extremely pleasant place of residence—at least so I have always regarded it. The various wild fruits flourish and ripen; and even the crop of the service-berry, which when in flower you are aware is extremely susceptible to frost, is rarely blighted. Potatoes do not always succeed, it is true; but the failure may, I think, be ascribed usually to errors in the selection of the spots cultivated. Some attention to this point is necessary, in order to avoid the occasional night-frosts to which the hollows are subject, but from which the slopes towards the Lake are usually free. No better evidence that the climate is on the whole a genial one need be adduced than this—that the tender little humming-bird is common during summer at Stuart's Lake as well as in the less elevated and hotter parts of British Columbia.

I need not recall Your Excellency's attention to the fact that a difference of temperature, equal to at least ten degrees of Latitude, exists during winter between positions on the Pacific Coast, as compared with others on the Atlantic. The difference is more marked as we approach the Coast on either side; but is likewise very perceptible in the Interior of British Columbia, where the cold is neither so frequently severe nor so continuous as on the Eastern side of the Rocky Mountains.

I have the honor to be,
 To His Excellency } &c. &c. &c.
 Governor Douglas, C. B. } (Signed) * * * *

Works of Reference.

- Vancouver's Voyage on N. W. Coast of America, 1790-95.
- Voyage of Portlock and Dixon on N. W. Coast of America.
- Voyage of Meares on N. W. Coast of America.
- Voyage à la Côte du Noid Ouest dans les Années 1810-15, par Gabriel Franchère.
- Travels of Sir Alex. McKenzie to the Pacific Ocean, &c., in the years 1789-93.
- Ross Cox's Columbia River.
- Jewett's Narrative of a captivity at Nootka Sound in 1804.
- An Essay on Vancouver Island by Dr. Charles Forbes, R. N., 1862.
- A work on Vancouver Island by J. D. Pemberton, Esq., Surveyor General of the former Colony.—London 1862.
- Travels of Lord Milton and Dr. Cheadle.
- A work on the West Coast of Vancouver Island by Gilbert M. Sproat, Esq.

Overland Route through British North America, by Alfred Waddington.—Longmans, London, 1868.

Official Report on British Columbia of the Hon. H. L. Langevin, Minister of Public Works of Canada, 1871.

Vancouver Island and British Columbia, by Dr. Rattray, R. N.

There is also a work treating of the North-West Coast by John Dunn, a young man formerly in the employ of the Hudson's Bay Company as a storekeeper, &c., which gives, I believe, a good deal of information about the Coast, in its condition prior to colonization.

NOTE P. S. Since the preparation of the above list two works, treating of British Columbia, of recent date, have been brought under my notice ; which, with the reviewer's comments upon one of them, form the text for some remarks which I judge it necessary to make in the Supplementary Chapter. A copy of one of these works—called, I think, “Queen Charlotte Islands”—by a Mr. C. E. Poole, I have seen and cursorily perused. The other, styled “Very Far West Indeed,” written professedly by a Mr. R. Byron Johnson, I am acquainted with only through the columns of the *Saturday Review* of 25th May last. These works may be read as romances—provided, and provided only, they be sufficiently attractive as such ; a very questionable proposition : but as conveying, in the reviewer's words, any “useful hints as to how and “where to settle in British Columbia, to the emigrant who has a “natural taste for ‘bars and Injuns,’ or whose sense of daring is “tickled by the Rapids of the Fraser,” both are worse than worthless—they are ineffably delusive. In the first we have very wonderful adventures by flood and field. Bears of course figure conspicuously ; Indians are shot down—on paper at least—as coolly, and with as little compunction, as a Cockney sportsman “pots” sparrows. Formidable trails are followed over imaginary mountains “sixteen thousand” feet in height ; and an ordinary canoe voyage, which had been performed scores of times before, and is now almost weekly performed by unpretending travellers passing to and fro, is magnified into an exploit exceeding that of Captain Bligh, of “Bounty” celebrity, with which it is specially and most audaciously contrasted. Withal it may be said that the author does not apparently seek to convey an injurious impression of the Province as a field for settlement. His faults proceed from a queer idiosyncrasy, which prompts him, where personally concerned, to view every matter through a magnifying glass, to the constant exaltation of his own individual prowess. The other work, with all the faults of the first, contains some astounding statements, even more reprehensible, if possible, from an extraneous point of view : and, if we may judge from the extracts, is altogether conceived in a spirit of exaggeration and detraction, with motives which we will not attempt to analyse. A notorious steam-boat story, for instance—apocryphal at the best—has been taken from the stock traditions of the Lower Mississippi, and adapted to the meridian of the Fraser. Again a *sensational* anecdote of alleged mining adventure in Caribou, resulting in an asserted execution under “Lynch-law,” is gravely related. Whether the occurrence ever happened in any place we cannot pretend to say—but this

may be safely affirmed, that it never occurred in any part of British Columbia : neither it nor any other similar case of "Lynch-law." Miraculous rapids are familiarly talked of, situated midway in the course of the Fraser, and yet 1,200 miles from its source—the the whole length of the river meanwhile not exceeding 800 miles. We will say nothing of the want of good taste that pervades the work—manifested in many unjustifiable personal allusions—the truth of the assertions in one particular case having moreover been directly controverted—and notably in the coarse sneer at the religious persuasion of a respectable dealer of the Upper Country, whose name is brought incidentally and unwarrantably on the carpet. Nor will we comment on the barbarous slang which is put forward as characteristic of the Country : as if people here habitually talked of "bars and Injuns and grizzlies;" or that the educated American gentlemen who form a highly-respected portion of the community, employ a jargon which, if employed at all, is confined to the rudest classes of the remote interior States.

Enough, however, of these productions, which I have been reluctantly brought to notice. It is a relief to refer once more to the healthily-written book of Lord Milton and Dr. Cheadle, before noticed ; and to join with it the work of Mr. Sproat above mentioned—of which, by the way, I cannot recall the exact title. The perusal of these and other similar writings, proceeding from gentlemen of known standing and reputation, will serve to correct the erroneous impressions possibly derived from other questionable sources. Among the former, however, I ought not to omit special reference to the Report of the Honorable Mr. Langevin, before noted—the result of that gentleman's tour through the Province in the autumn of last year. I have not yet seen a copy of this production, but am informed that it contains a mass of statistical information of the most valuable kind, with remarks justly appreciative of the varied resources and capabilities of the Province.

APPENDIX H-2.

In direct relation with the remarks at page 102, I quote the following passage from the work of Captain Vancouver:—

"Here [at Attowai, Sandwich Islands] we rejoined the American brig Washington.* * * * * * * * * Amongst other articles that Mr. Kendrick [the master] had procured whilst at Woahoo was eighty pounds of very fine bees-wax that had been drifted by the sea on to the shores of that island, and had very recently been picked up by the natives ; and I now understood that some pieces had also been procured from the natives of the other islands by Mr. Kendrick."—Vancouver's Voyage, Vol. V., p. 121. 8 vo. Ed. London 1801.

APPENDIX I-2.

Note referring to a passage regarding the progress of the Salmon, at page 27. "The Tâlo, following up the other branch, do not, like the Kase, enter the Nejâ-côh," &c.

The River Nejâ-côh (*Rivière du Large*) waters the country inhabited by the Nejâ-otin (*Gens du Large*) a remote branch of the Tâculluy, who so distinguish them from the rest of the tribe. This river joins the *Nautlay-âcôh* (or Fraser's Lake Branch) from the south-westward, about a mile below the effluence of Fraser's Lake; and it is thus that the description in the text is to be understood.

This explanation appears necessary, since I notice that in a late map of the Province the term "Nejâ-côh" (or Necho) has been inadvertently extended as far as Thle-et-leh (Fort George), so as to comprise the whole stream there uniting with the eastern Fraser, and usually called STUART'S RIVER, of which the true Nejâ-côh is only a tributary. Hence the reader, curious to trace the description by the map, would, if unadvised, be puzzled to reconcile the discrepancy.

ERRATA.

PAGE 7, line 9, for *Camosae* read *Camosac*.
 „ 33, „ 5, for *is* read *are*.
 „ 33, „ 9, for *spawing* read *spawning*.
 „ 34, „ 8, for *Mussels* read *Muscles*.
 „ 41, „ 18, for *tarce* read *tarsi*.
 „ 95, „ 34, for *centered* read *centred*.

CORRECTION.—At page 3, line 5, for "about 122° 40' West Longitude," inadvertently set down, read "about 123° 12' West Longitude."

 *Gilbert Malcolm Sproat, Esquire, of No. 4, Lime Street Square, London, W. C., England, is the Agent General of the Province for the United Kingdom.*

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